CONTENTS OF SUPPLEMENT.

PERSONAL 125
  Obituary 125
ENGINEERING SOCIETIES 125
  Coming Technical Meetings 125
NEW PUBLICATIONS 126
  Trade Publications 127
CONSTRUCTION NEWS:
  Condensed List of Contracts Pending 128
  Railways 128
  Street and Electric Railways 129
  Electric Light and Power 129
  Bridges 130
  Buildings 131
  Water-Works 131
  Irrigation 132
  Sewerage 132
  Garbage Disposal and Street Cleaning 133
  Streets and Roads 133
  Manufacturing Plants 133
  Gas Plants 134
  Miscellaneous Contracts 134
  Contract Prices 134
INDUSTRIAL NOTES 136
PROPOSALS 136

PERSONAL.

Mr. A. J. McPherson has resigned his position as Town Engineer and Water-Works Superintendent of Galt, Ont.

Messrs. Riggs & Sherman, civil engineers, of Toledo, O., have been appointed Consulting Engineers for Lorain, O.

Mr. E. H. Harriman, of New York city, has been elected President of the Chicago & Alton R. R. under its new ownership.

Mr. G. H. Swan has been appointed Superintendent of the Municipal Water-Works of Niagara Falls, N. Y., to succeed Mr. Henry Keller.

Mr. H. C. Robinson, Chief Engineer of the Washington County R. R., has resigned on account of ill health, and will return to his former home in Portland, Me.

Mr. E. K. Blanchard, of St. Louis, Mo., Assistant Engineer, Illinois Central R. R., has been appointed Division Engineer of the Fort Dodge & Omaha extension of that road.

Col. James D. Bell has been appointed a Bridge Commissioner on the new East River Bridge Commission, by Mayor Van Wyck, of New York city, to succeed the late Mr. Thos. S. Moore.

Mr. John B. Newton has been appointed Chief Engineer of the Atlanta, Knoxville & Northern Ry. in charge of maintenance of way, structures and all betterments, with headquarters at Marietta, Ga.

Mr. Trevor McClurg Leutzé, M. Am. Soc. C. E., First Assistant Engineer of the New York State Canals, has been appointed Division Engineer of the Eastern Division, to succeed Mr. D. C. Smith, resigned.

Col. Adelbert R. Buffington, U. S. A., has been appointed to be Brigadier-General and Chief of the Army Bureau of Ordnance, to succeed the late Brig.-Gen. Daniel W. Flagler, whose death was noted in our last issue.

Messrs. T. N. Jacob, of Washington, D. C.; J. E. Hildt, of Columbus, O.; H. C. Allen, of Indianapolis, Ind., and Geo. E. Boyd, of Chicago, have been appointed resident engineers on the Fort Dodge & Omaha extension of the Illinois Central R. R.

Mr. Jerre T. Richards, Jr., M. Am. Soc. C. E., has resigned his position as Superintendent of Construction of the Pardee Iron Works, of New York, to accept the position as General Manager of the Mackolite Fireproofing Co., with headquarters at 1301 Schiller Bldg., Chicago.

Mr. Charles Evan Fowler, M. Am. Soc. C. E., formerly Chief Engineer of the Youngstown Bridge Co., has opened an office for private practice at 1404 Bowling Green Building, New York city. He will also represent the Osborn Co., Inspectors of Iron and Steel Structures, of Cleveland, O.

Mr. C. H. Ackert has been appointed President of the Elgin, Joliet & Eastern Ry., to succeed Mr. Samuel Spencer, and also President of the Chicago, Lake Shore & Eastern Ry., in place of Mr. W. G. Brinson. These changes practically bring under one management the railway lines controlled by the Federal Steel Co.

Mr. John F. Stevens has been appointed Chief Engineer of the Great Northern Railway Line, vice Mr. N. D. Miller, resigned. He will have charge of the location and construction of all lines, and will direct the location of and provide plans for all bridges, buildings, tracks and structures on the company's property, and the method of maintaining the same.

OBITUARY.

Mr. Guy Culgin, a builder and ex-President of the General Society of Mechanics and Tradesmen, died in New York city, on April 5, aged 60 years.

Mr. L. V. Bockius, Vice-President of the Diebold Safe & Lock Co., and a director of the Cleveland Terminal & Valley R. R. Co., died at Canton, O., on April 9, aged 73 years.

Mr. Henry Augustus Taylor died at his home at Milford, Conn., on April 8, aged 60 years. In 1878 he built the Buffalo, Rochester & Pittsburg R. R. into Rochester, N. Y., and also constructed a part of the Rome, Watertown & Ogdensburg R. R. He was also interested in many other railways, and was Chairman of the Board of Directors of the Cincinnati, Hamilton & Dayton Ry. Co. and the Cleveland, Lorain & Wheeling Ry. Co.

Mr. Felix Brown, of the firm of A. & F. Brown, owners of the Progress Iron Works, died at his home at Elizabeth, N. J., on April 6, aged 70 years. Mr. Brown was the inventor of the foghorn now in use in the United States lighthouses.

Capt. Jas. J. Power, civil engineer, died at Perry, Okla., on April 9, aged 67. He was a son of the late Gen. Thos. J. Power, civil engineer, of Rochester, Pa.; and was engaged in engineering work in various parts of the country during a period of 46 years.

Mr. Wallace C. Andrews was burned to death in a fire at his home in New York city, on April 7. He was President of the Hudson River Stone Service Supply Co., the New York Ice Co., the New York Steam Co., and the United States Mineral Wool Co., and Director of the New York Launch & Engine Co., the Safety Car Heating & Lighting Co., and the Standard Coupler Co. Mr. Andrews was born of New England parentage, at Vienna, O., in 1833.

Mr. Menard K. Bowen, President of the Chicago City Ry. Co., died in Chicago, on April 9, after an operation for appendicitis. He was born at Jefferson Barracks, Mo., in 1856, and was the son of Gen. John S. Bowen. He studied engineering at the St. Louis University and afterward at the Washington University at St. Louis. When 19 years old he entered the government service as an assistant engineer on a triangulation survey of the Mississippi River, and later was made assistant engineer on the jetty work below New Orleans. In 1880 he took charge of the survey work from Fort Smith, Ark., to California for the St. Louis & San Francisco Ry. After several years of railway work he entered the street railway business, his first work in this field being in Kansas City, where he was chief engineer and superintendent of construction, and afterwards superintendent of the completed system. The Short Electric Ry. Co. of Cleveland, O., next engaged him, and he went to New York as its commercial representative. Mr. Bowen went to Chicago as assistant to Mr. Holmes in the extensions of the South Side cable and electric system, and in the reorganization of the work was made superintendent, which position he held until the office of general manager was created for him in 1897. On Jan. 15, 1898, upon the retirement of Mr. Wheeler, he was elected President of the company, and continued in that office until his death.

◆

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

BROOKLYN ENGINEERS' CLUB.
April 13. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.

ST. LOUIS RAILWAY CLUB.
April 14. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

WISCONSIN STATE CHEMICAL ASSOCIATION.
April 14. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.

THE ENGINEERS' CLUB OF PHILADELPHIA.
April 15. "Costal Topography," Prof. Oscar C. S. Carter. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF COLUMBUS.
April 15. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' CLUB OF ST. LOUIS.
April 17. Secy., E. R. Fish, 2401 N. Spring Ave., St. Louis, Mo.

TECHNICAL CLUB OF OMAHA.
April 17. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' CLUB OF MINNEAPOLIS.
April 17. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
April 17. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

WESTERN RAILWAY CLUB.
April 18. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
April 18. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

BOSTON SOCIETY OF CIVIL ENGINEERS.
April 19. Secy., S. E. Tinkham, City Hall, Boston, Mass.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
April 19. Secy., C. W. Hunt, 220 W 57th St., New York city.

WESTERN SOCIETY OF ENGINEERS.
April 19. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

WESTERN FOUNDRYMEN'S ASSOCIATION.
April 19. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

ENGINEERS' CLUB OF CINCINNATI.
April 20. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
April 20. Secy., F. A. Charpiot, P.O.Box 13, Savannah, Ga.

NEW YORK RAILROAD CLUB.
April 20. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

CHICAGO ELECTRICAL ASSOCIATION.
April 21. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

ROCHESTER ENGINEERING SOCIETY.
April 21. Secy., John F. Skinner, Reynolds Library Bldg., Rochester, N. Y.

THE DETROIT ENGINEERING SOCIETY.
April 21. Secy., Henry Goldmark, Wayne Co. Savings Bank Bldg., Detroit, Mich.

FRANKLIN INSTITUTE.
April 25. "Electro-Magnetic Mechanism, Design of, with Reference to High Frequency Telegraphic Receivers," Prof. R. A. Fessenden. Secy., Wm. H. Wahl, 15 South 7th St., Philadelphia, Pa.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
April 25. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
April 26. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
April 27. Secy., H. C. McLeod, 112 Mansfield St., Montreal, Que.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
May 1. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.

ENGINEERING SOCIETY OF WESTERN NEW YORK.
May 1. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

FOUNDRYMEN'S ASSOCIATION (Philadelphia).
May 3. Secy., Howard Evans, Pier 45, N. Delaware Ave., Philadelphia, Pa.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
May 5. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
May 5. Secy., Henry I. Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.

ENGINERS' CLUB OF KANSAS CITY.
May 8. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

THE LOUISIANA ENGINEERING SOCIETY.
May 8. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

NEW ENGLAND RAILWAY CLUB.
May 9. Secy., Edw. L. Janes, P. O. Box 1158, Boston, Mass.

NORTHWEST RAILWAY CLUB.
May 9. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

DENVER SOCIETY OF CIVIL ENGINEERS.
May 9. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 9-12. Spring meeting, Washington, D. C. Secy., F. R. Hutton, 12 W. 31st St., New York city.

AMERICAN INSTITUTE OF ARCHITECTS (New York Chapter).
May 10. Secy., Chas. I. Berg, 10 West 23d St., New York city.

ENGINEERING ASSOCIATION OF THE SOUTH.
May 11. Secy., H. M. Jones, 1000 Broad St., Nashville, Tenn.

RAILWAY SIGNALING CLUB.
May 11. Acting Secy., C. O. Tilton, C. M. & St. P. Ry., West Milwaukee, Wis.

CENTRAL RAILWAY CLUB.
May 12. Secy., H. D. Vought, 114 Fifth Ave., New York city.

MONTANA SOCIETY OF ENGINEERS.
May 13. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

NATIONAL ELECTRIC LIGHT ASSOCIATION.
May 23-25. Annual meeting, New York. Secy., Geo. F. Porter, 136 Liberty St., New York city.

THE DETROIT ENGINEERING SOCIETY.—A special meeting of this society was held on April 7. The proceedings of the evening took the form of a discussion on "Locks and Lock Gates for Ship Canals."

CANADIAN SOCIETY OF CIVIL ENGINEERS.—A regular meeting of this society was held March 30. A paper was read by W. T. Ashbridge, entitled "The Construction of the Main Intercepting Sewers of the City of London, Ont."

AMERICAN SOCIETY OF CIVIL ENGINEERS.—A regular meeting of this society was held at the Society House in New York city on April 5. The paper of the evening, by L. M. Hoskins, was entitled "General Criterion for Position of Loads Causing Maximum Stress in Any Member of a Bridge Truss."

THE AMERICAN GEOGRAPHICAL SOCIETY.—This society has purchased a lot on West 81st St., New York city, near Central Park, and will, it is understood, immediately erect a society house. The lot is 50 × 100 ft., and it is the intention to make the new building a very complete and comfortable headquarters.

RAILWAY SIGNALING CLUB.—The regular meeting will be held in Chicago, at the Great Northern Hotel, at 2:30 p. m., April 25. Two papers will be presented: "Main Air Pipe and Connections for Electro-Pneumatic Signals and Switches," by A. M. Keppel, Jr.; "Inspection of Interlocking Plants," by W. H. Elliott. The club has been invited to visit Pacific Junction, on the Chicago, Milwaukee & St. Paul Ry., to inspect the new 108-lever interlocking machine, and the outdoor work, which is designed with a view to permanence of construction.

C. O. Tilton, Secy.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.—A meeting of this society was held at Buffalo, N. Y., on April 3, to consider a preliminary report of the Pan-American Exposition. The report referred principally to the selection of a site, of which about 20 had been offered. The committee's work so far has consisted in making maps showing the locations of the sites, wooded lands, the nature of the earth, the drainage conditions, and accessibility, so far as water and railways are concerned. There was considerable discussion as to the engineering features of the Exposition, and the sites suggested were considered from this standpoint.

AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS.—This is the name of a new society organized in New York city on April 6. The object of the society is to promote good-fellowship among its members and to increase the efficiency of the profession by establishing some standard by which landscape architects may be chosen for special work, just as has been done by the Architectural League. The officers of the association are: Pres., J. C. Olmstead, of Olmstead Bros., Boston; Vice-Pres., Samuel Parsons, Jr., of Parsons & Pentecost, St. James Bldg., New York; Secy., Daniel W. Langton, of New York, and Treas., C. W. Laurie, of New York. The next meeting of the society will be held at Boston.

THE ENGINEERS' CLUB OF PHILADELPHIA.—A meeting of this club was held on April 1, with 60 members and visitors present, and after some routine business was dispatched Mr. Richard L. Humphrey presented some notes on "The Testing Laboratory of the City of

Philadelphia." This was an illustrated description of some of the improvements which have been made in the equipment and operation of the municipal laboratory of Philadelphia during the past three years. Mr. Carl Hering followed, presenting some notes on "Recent Development in Electrical Engineering," in which attention was called to electrolysis of gas and water mains, improvements in electric traction and power transmission, schemes for the generation of electricity near coal mines, etc.; also a description of the Marconi system of wireless telegraphy.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. —The list of candidates to be voted for at the spring meeting of the society, to be held at Washington, D. C., May 9-12, has been sent to members. The list is unusually large, and may be taken as an indication of the revival of industrial activity and the growing importance of the society. It includes the names of 39 candidates for full membership; 5 to be voted for as associates; 6 for promotion to full membership; 1 for promotion to associate membership, and 34 junior applicants. This makes a total of 84 new and transferred members, against 22 who were admitted and transferred at the winter meeting, held in New York in November, 1898. If these are all admitted the total membership of the society will be 1,995, of which number 15 will be honorary members, 1,426 will be full members, 123 associates and 381 juniors.

LITERARY MAGAZINES.—The April "Cosmopolitan" contains a new story of the Keely Motor, by Julius Moritzen; an article on a kindred subject, "Some Tricks of Ancient Temples," by Henry R. Evans, and a description of a rattlesnake's den that will match any snake story which any of our readers could tell who have made surveys in those parts of the Southwest where rattlers abound.

In the "Century," Prof. W. C. Peckham writes on Liquid Air, giving the best popular account of recent scientific progress in the liquefaction of gases that we have anywhere seen. We looked with interest to see whether he too had swallowed Mr. Tripler's remarkable story of liquid air as a means of multiplying power, with which a writer in "McClure's" astonished the reading public last month. Prof. Peckham has evidently heard Tripler's claim, but he contents himself with the following guarded statement:

> Eager minds are striving to invent grander uses for the greater forces which the recent results place at our disposal, and some think they can foresee the day when the power stored in these abysses of cold will enable man to do that which is now looked upon as impossible, or at least chimerical.

In the April "Atlantic" Mr. T. J. J. See writes on "The Solar System in the Light of Recent Discoveries," and explains a new law of temperature which he believes regulates the temperature of every gaseous star in the universe. According to this discovery, the original nebula out of which the bodies of our solar system are supposed to have been developed may have been cold instead of hot. The heat of the sun and other bodies has been developed by their gradual condensation and contraction. The law above referred to is that the increase in the total amount of heat generated in a gaseous mass in condensing from infinite expansion varies as the square of the radius. In the same magazine Mr. Chas. M. Robinson reviews the improvement in the condition of city life which has been effected during the past 20 years.

In the "Popular Science Monthly" Mr. Edward Atkinson presents his views on the wheat production controversy, which has already been noticed in these columns. Life on a South Sea whaling ship in the days when New Bedford's great industry was at its height is described by F. T. Bullen. The "North American Review" opens with a paper by Congressman John Hull on the Army reorganization. He places the responsibility for the makeshift bill passed by the last Congress where it rightly belongs. "The Future of Cuba" is the subject of a paper by Robert P. Porter, who shows very plainly that the material interests of Cuba will be best served by close identity with the United States. He points out the kind of labor needed and the fields for profitable enterprise in Cuba, and this portion of his article should have much practical usefulness. Another paper in the same magazine on the Mexican Hacienda system is of considerable interest at this time when the new problem of controlling the labor of tropical countries is before us.

In the April "Forum" Rev. Gilbert Reid discusses American opportunities in China, and urges that America should unite with England to secure the maintenance of the "open door" in China. It is to be feared, however, that the opportunity to effectively do this has already passed. "The Industrial Development of Russia," by Prof. Ivan Oseroff, of Moscow University, is a most interesting account of the growths of manufacturing, mining and other industries in Russia. It is of interest to note that Russia has a sugar trust, which was organized at the suggestion and with the co-operation of the government.

The trial trip of the "Oregon" is described by Rear-Admiral Beardslee in the April "Harper," and is one of the best accounts of the contract trial of a battleship that we have seen printed anywhere. In the same magazine Mr. Russell Sturgis continues his papers on city house architecture, discussing closets, plumbing, heating and house equipment generally.

In the April "Scribner's" we find an interesting account of a journey to the Klondike in winter, by Frederick Palmer. "The Review of Reviews" for April has a couple of papers on our Pacific problems, "American and Malay in Hawaii," by Winthrop L. Marvin, and "Material Problems in the Philippines," by Samuel W. Belford. Mr. W. H. Tolman also writes on landscape gardening for factory homes, and tells of the wonderful results which have been accomplished by an enterprising and liberal-minded manufacturer at Dayton, O. "The Fortnightly Review" for March contains a better account of General Wood's work at Santiago than we have seen in any American periodical.

REPORT OF THE COMMISSIONER OF EDUCATION for 1896-7.—Vol. 2. Cloth; 6 × 9 ins.; pp. 1,137—2,390. Washington: Government Printing Office.

This report contains a vast amount of matter relating to all grades and classes of education, including a directory and statistics of technical schools.

CONNECTICUT SOCIETY OF CIVIL ENGINEERS AND SURVEYORS.—Proceeding for 1898-9. Geo. K. Crandall, Secretary, New London, Conn. Paper; 6 × 9 ins.; pp. 83; illustrated. Price, 50 cts.

Most of the matter in this report relates to the recent winter meeting of the society, an account of which was given in our issue of Jan. 11, 1899.

THE HORSELESS AGE. E. P. Ingersoll, Editor and Proprietor, New York City. 9¼ × 12 ins.; pp. 25. Illustrated.

This is number 1, volume 4, of a technical journal published in the interest of the motor vehicle industry. With the present issue it changes from a monthly to a weekly publication, and will henceforth be issued on Wednesday of each week.

THE CIVIL ENGINEER AS A GUARDIAN OF THE PUBLIC HEALTH.—By J. B. Johnson, Member of the Engineers' Club of St. Louis. Reprinted from the Journal of the Association of Engineering Societies, vol. xxi., No. 6 (Dec., 1898). Paper; 6 × 9 ins.; pp. 11.

In this paper the author reviewed rapidly some of the ways in which the public health, especially of our cities, is conserved by the work of engineers.

DRINKING WATER; CITY, TOWN AND RURAL SUPPLIES.—By A. W. Blair, State Chemist of North Carolina. Bulletin No. 161. The North Carolina Agricultural Experiment Station. Paper; 6 × 9 ins.; pp. 207-23. Raleigh, N. C.: Address the Director.

This is a somewhat popular review of the subject indicated in the title, with directions for taking and sending samples and the results of a number of analyses.

PASSAIC RIVER POLLUTION.—Report of Commission Appointed to Consider the Pollution of the Rivers and Streams of New Jersey. Jas. A. Exton, Secretary, Arlington, N. J. Paper; 6 × 9 ins.; pp. 54.

The main part of this report was abstracted at length in our issue of March 9. In addition to the ideas on the solution of the Passaic pollution problem, advanced by the Commission, there was a number of reports from committees appointed by the several committees affected and a minority report by Mr. Jno. Hinchliffe, Mayor of Paterson.

AN IMPROVED FILTER FOR MICROSCOPICAL WATER ANALYSIS.—By Daniel D. Jackson, S. B., Chemist, Department of Water Supply, Brooklyn, N. Y. Reprinted from the "Technology Quarterly," December, 1898. Paper; 7 × 10 ins.; pp. 5; one illustration.

This pamphlet describes an improvement of the Sedgewick-Rafter method, designed to secure more accuracy in determining delicate organisms, like protozoa. It consists of an attachment to the ordinary filter tunnel, by means of which samples may be collected with less danger of destruction than ordinarily.

LEGISLATION BY STATES IN 1898.—State Library Bulletin No. 10. Albany: University of the State of New York. Paper; 6 × 9 ins.; pp. 742—909. Price, 25 cts.; or $1 each for Vols. 1 or 2, covering years 1890-4 and 1895-9, respectively.

This is a most admirable and useful piece of work. The most important legislation of the year is reviewed and correlated with previous legislation. Then follows a well classified summary of all except purely local legislation. Where the statutes summarized have been declared unconstitutional between the date of passage and the close of 1898, the fact is noted.

STATE ENGINEER OF WYOMING.—Report for the years 1897 and 1898. Elwood Mead, Engineer, Cheyenne, Wyo. Paper; 6 × 9 ins.; pp. 304; illustrated.

This report contains a large amount of matter relating to irrigation and kindred subjects in Wyoming, including some handsome views of natural scenery. In our issue of Dec. 29, 1898, we published a long extract from advance pages of the report, under the title, "Stream Gagings and Other Studies Relating to Irrigation in Wyoming."

STATE ENGINEER OF UTAH.—Report for the Years 1897 and 1898. R. C. Gemmell, State Engineer, Salt Lake City. Paper; 6 × 9 ins.; illustrations and tables.

Appended to Mr. Gemmell's review of the work of his office are "Special Instructions to Watermasters as to Measurements of Water so as to Secure a Just Distribution of the Same." Besides illustrated descriptions of various measuring devices some useful tables are given. Special computations were made for the table giving the discharges over rectangular weirs, with two complete contractions, so that the quantities could be read direct, without subsequent computations; the heads are also given in inches, approximately, as well as in decimal parts of a foot. All this trouble was taken to aid the watermasters, few of whom are engineers. The tables may prove of value to others than those for whom they were primarily intended.

THE PROBLEM OF WATER PURIFICATION FOR THE CITY OF PHILADELPHIA.—By P. J. A. Maignen. Reprinted from Procedings of the Engineers' Club of Philadelphia, vol. xvi., No. 2 (March, 1899). Paper; 6 × 9 ins.; pp. 25.

This paper describes a patented system of filtration which the author is promoting in this country. It appears from the paper that for the water supply of Philadelphia double filtration is suggested, with a primary filter composed partly of charcoal, operating at 120,000,000 gallons an acre, and a secondary filter of sand covered with asbestos, working at 12,000,000 gallons an acre.

ENGINEERING CONSTRUCTION IN CONNECTION WITH RAINFALL.—By J. I. Haycroft, M. Inst. C. E. I., Assoc. M. Am. C. E., Woollahra, N. S. W., Australia. Reprinted from the Journal and Proceedings of the Royal Society of New South Wales, Vol. xxxii. Paper; 5 × 7 ins.; pp. XXX-LXIII.

The subject named is discussed chiefly from the standpoint of the relation between rainfall or stream flow and railway design and construction. Some consideration is also given to municipal engineering problems. A number of formulas are presented and discussed, and several authorities, mostly American, are cited, by quoting from their published works and personal correspondence with the author.

AZIMUTHS OF THE NORTH POLE STAR for 1899 and 1900. Lat. 48° N. to Lat. 54° N. By S. A. Roberts, Dominion and Provincial Land Surveyor, Victoria, B. C. Paper, 9 × 6 ins. pp. 5. $1.00.

This useful set of tables is accompanied by a full explanation of their use and the rule for finding the azimuth. With them and a reliable watch, Mr. Roberts claims that a true meridian, or any other line, can be determined, whenever the North Star is visible, without the ordinary tedious method of waiting for the elongation. The azimuths are given to the nearest tenth of a minute for the latitude used.

INTERNATIONAL EXPOSITION UNIVERSELLE, PARIS, 1900.—General information for citizens of the United States of America who desire to become exhibitors. Regulations, classifications. Compiled under the direction of the Commissioner-General for the United States. Chicago, Ill. January, 1899. Paper; 9 × 6 ins.; pp. 110.

This compilation includes the law of the U. S. establishing the commission; the various decrees of the French Republic relating to the exposition; the general staff of the exposition in Paris; a description of the grounds and buildings; the general classification of exhibits under 18 heads; railway agreements; freight rates to Paris, and general information for exhibitors. Among the decrees will be found the awards to exhibitors and diplomas, and the duties of the international jury and the method of organization. The Chicago office of the American commission is in the Auditorium Building; the New York office in the Equitable Building, and the Paris office is at No. 20 Avenue Rapp.

IRON MAKING IN ALABAMA.—By Wm. Battle Phillips, Ph. D., Alabama Geological Survey. Second edition. Montgomery, Ala., 1898. Paper; 9 × 6 ins.; pp. 380.

The first edition of this report was published in 1896, and the present edition recasts the entire chapter on fuels and adds a new chapter on pig-iron. The writer has been the consulting chemist for the Birmingham Rolling Mill and Steel Works since the building of their first basic furnace, and he treats of the ores found—especially hematite ores, the fluxes, fuel, furnaces, pig-iron and cost of production in Alabama. Other chapters relate to coal, concentration of low grade ores, basic steel and iron, and the coke furnaces. In 1889-90 the average cost of making pig-iron in Alabama was about $9.50 per ton; in 1890-97 the lowest cost was $5.75; this question of cost is treated in minute detail. The general average price of Alabama coal, f. o. b. at mines, was $0.88 per ton in 1897, with a total production of 5,893,770 tons for that year. The average cost of hard, soft and brown ore, in 1896, was $0.672, $0.572 and $1.07 per ton respectively; the limestone cost $0.647 and the coke $1.727 in the same year. In making the iron, in 1896, the materials cost 70.9%; labor 15%; supplies and current repairs 4.8 and 3.2%, and the remainder was represented by general expenses, relining, taxes and bad debts.

WATER SUPPLY AND IRRIGATION PAPERS OF THE U. S. GEOLOGICAL SURVEY.—No. 19, Irrigation near Merced, Cal., by Carl Ewald Grunsky; pp. 58. No. 20, Experiments with Windmills, by Thos. O. Perry; pp. 96. Washington, D. C. Paper; 9 × 6 ins.

The first of these papers describes the hydrography of the San Joaquin, Merced and other rivers, and illustrates and describes the canals, dams and appurtenances employed in the development of the irrigating system on these rivers. In an introduction to the second paper, Mr. F. H. Newell, Chief Hydrographer, points out the value of the windmill throughout the sections of arid and semi-arid country where underground water is to be found. In these sections the wind is almost constantly blowi[illegible] Mr. Newell briefly outlines the best practice in raising the water by windmills, storing and distributing it to the crops. The experiments upon windmills here set forth were commenced in 1882 and ended in 1883; and the only well defined previous records date back about 125 years, as made by John Smeaton, and reported to the Royal Society in 1759. Mr. Perry describes and illustrates the apparatus employed by him, and then in a series of tables gives the results of his experiments with various types of wheels. As the result of these experiments he discusses the best angle of of weather, the automatic brake-adjuster, the theory of the action of wind on sails, barometric and thermometric influences, axle friction, the construction of sails, etc.

Under the head of power windmills he deduces that in a 5-mile wind a 12-ft. windmill develops a power about equal to 1-40 of a horse-power. Computing the power of other wind velocities, according to the law of cubes, he finds as follows for a 12-ft. wheel: 5-mile wind, 0.025 HP.; 10-mile wind, 0.2 HP.; 15-mile wind, 0.675 HP.; 20-mile wind, 1.6 HP.; 25-mile wind, 3.125 HP.; 30-mile wind, 5.4 HP.; 35-mile wind, 8.575 HP., and in a 40-mile wind, 12.8 HP. Most of the 12-ft. wheels are now made strong enough to stand the strain of furnishing 13 HP., or to work in a 40-mile wind.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins. and 9 x 12 ins.)

PORTABLE FORGES.—The Crumlish Forge Co., Buffalo, N. Y. Circular.

This is a four-page circular giving a few testimonials of the value of the Crumlish portable forges.

PUMPS, AIR COMPRESSORS AND LIFTS.—The American Well Works, Aurora, Ill. Paper; 6 × 9 ins.; pp. 133-227. Illustrated.

This catalogue shows a large variety of pumping engines, air apparatus and other water-works supplies.

BUILDING CEMENT.—Oklahoma Cement & Plaster Co., Hickox Building, Cleveland, O. Paper; 3 × 6 ins.; pp. 32.

This pamphlet relates to a cement for hard finish and various building purposes.

THE OHIO GAS AND GASOLINE ENGINE.—The Frey-Sheckler Co., Bucyrus, O. Pamph.; 8 × 11 ins.; pp. 22. Illustrated.

This pamphlet, as implied by the title, discusses the engine made by this concern.

PUMPING MACHINERY.—Dean Bros., Indianapolis, Ind., Paper; 3 × 6 ins.; pp. 16. Illustrated.

This little pamphlet describes a selected few of the pumps made by Dean Bros., including hydraulic, boiler feed, tank or light service and geared power pumps.

THE IRON AGE INDEX SUPPLEMENT.—David Williams Co., New York City. Pamph.; 8¼ × 12⅝ ins.; pp. 81.

This is the annual trade index issued by the "Iron Age." It also contains an index to the reading matter of Volume LXII.

WATER, GAS AND PLUMBING GOODS.—H. Mueller Mfg. Co., Decatur, Ill. Cloth; 6 × 9 ins.; pp. 207. Illustrated.

This is a detailed, fully illustrated price-list and catalogue of a wide range of supplies of the class indicated in the title.

ELECTRIC RAILWAY SUPPLIES.—The Ohio Brass Co., Mansfield, O. Pamph.; 6 × 9¼ ins.; pp. 140. Illustrated.

This is a fairly complete catalogue of electric railway supplies, including construction material, line devices, car appliances, switches, instruments, etc.

VALVES AND FIRE HYDRANTS.—John McLean, 208 Monroe St., New York city. Paper; 6 × 9 ins.; pp. 23. Illustrated.

This catalogue describes the Ayres and McLean hydrants, cast-iron pipe and specials, valves, lead furnaces and general gas and water-works supplies.

GAS AND GASOLINE ENGINES.—Newell Bros., Cleveland, O. Pamph.; 7¾ × 5¼ ins.; pp. 12. Illustrated.

This small pamphlet calls attention to the advantages of gas engines in general, but more particularly to the advantages of the double cylinder type manufactured by this company. A number of testimonials are also given.

IRON FENCES.—The Crandall Fence & Iron Co., Sandusky, O. Paper; 10½ × 6¾ ins.; pp. 24. Illustrated.

This catalogue illustrates and describes, with dimensions, a variety of types of wrought iron fences, gates, balconies, wire desk railing, fire escapes and smaller articles.

CLAY WORKING MACHINERY AND SPECIALTIES.—Simpson Machinery Co., Chicago, Ill. Pamph.; 6 × 9 ins.; pp. 48. Illustrated.

This pamphlet illustrates the line of clay working machinery and specialties manufactured by this firm. Forms of clay grinders, conveyors and presses are shown and described.

THE NATIONAL MUNICIPAL LEAGUE.—The National Municipal League, Clinton R. Woodruff, Secy. Pamph.; 3 × 4½ ins.; pp. 20.

This is No. 2 of the series of leaflets published by the League. This one tells "What it is Doing and What Others Have to Say About It," by means of quotations from the daily press.

WELLS.—T. P. Miller & Co., contractors for wells, water supply and water-works, 45 Michigan St., Chicago, Ill. Paper; 3½ × 5¼ ins.; pp. 16.

This pamphlet gives some particulars of the company's work, with a list of about 350 wells for water, oil, salt, etc. The depths of these wells are given, the deepest being 3,069 ft., at Galveston, Tex.

VALVE RESEATING MACHINES.—The Leavitt Machine Co., Orange, Mass. Pamph.; 6¾ × 4 ins.; pp. 42. Illustrated.

This little pamphlet illustrates and briefly describes the Morse & Dexter valve reseating machines of different sizes. Illustrations of United States battleships and cruisers using this valve reseater are also given.

NASH GAS AND GASOLINE ENGINES.—The National Meter Co., New York City. Pamph.; 9 × 6 ins.; pp. 32. Illustrated.

This pamphlet is intended to give a clear description of the Nash engines for both gas and gasoline, and at the same time afford an idea of some of its applications. To accomplish this, views of the different sizes of engine are given, with a suitable accompanying description. There are also illustrations and brief explanations of pumping outfits, deep well pumps, etc.

WROUGHT STEEL COOKING UTENSILS.—The Avery Stamping Co., Cleveland, O. Pamph.; 6¼ × 3¼ ins.; pp. 52. Illustrated.

This little pamphlet illustrates a variety of stamped steel cooking utensils, and also forms of steel fence posts for wire fences, elevator buckets, etc. Pressed steel seats for agricultural implements and specimens of heavy intricate hydraulic forgings are also shown.

RUBBER MATS AND MATTING.—New Jersey Car Spring and Rubber Co., Jersey City, N. J. Paper; 6¾ × 4¼ ins; pp. 48. Illustrated.

This catalogue illustrates, describes and gives the prices of a great variety of perforated, corrugated and special forms of rubber mats, both in given dimensions and in rolls. Small mats for household, hotel and trade use are also included.

BOLTS AND NUTS.—The Lamson & Sessions Co., Cleveland, O. Cloth; 6¼ × 4⅝ ins.; pp. 47. Illustrated.

This is practically a collection of tables giving the length, diameter, weight and price of many varieties of bolts and nuts; each type separately illustrated and described. Included in the lists are wrenches for a number of uses, with dimensions and prices.

PUMPS.—The Barnes Mfg. Co., Mansfield, O. Pamph.; 6½ × 9¼ ins.; pp. 141. Illustrated.

This catalogue gives information about the large variety of pumps manufactured by this concern. These range from the familiar pitcher spout hand pump to an improved deep well steam pump, and include centrifugal and triple power pumps. A number of pump and well fittings are also shown, and the pamphlet concludes with an illustrated list of valves and cocks.

AUTOMATIC MECHANICAL STOKERS.—The Wilkinson Mfg. Co., Philadelphia, Pa. Pamph.; 9¼ × 6¼ ins. Illustrated.

This pamphlet is a series of illustrations of some of the boiler plants using the Wilkinson stoker. Letters are given in each case to show the length of time the stoker has been in use and the character of work done. Other illustrations are given to show the methods of installing the stoker on different types of boilers.

CLAY WORKING MACHINERY.—The American Clay Working Machinery Co., Bucyrus, O. Pamph.; 7 × 10¼ ins.; pp. 201. Illustrated.

This pamphlet illustrates and describes in some detail several forms of pressed brick machines, tile presses, auger machines, cutting tables for hollow ware, steam presses for the manufacture of sewer pipes and in fact a full line of clay working machinery. A few of the last pages illustrate forms of brick and hollow tiles for building purposes.

LEAD-LINED IRON PIPE.—The Sanitary Lead Lining & Pipe Bending Co., Cremorne Wharf, Lots' Road, London, S. W., England. Paper; 9 × 13 ins.; pp. 7. Illustrated.

These circulars describe a complete assortment of lead-lined cast-iron pipe, bends, branches, junctions and other specials, designed for domestic drainage. The pipe is made in lengths of 12 to 72 ins., and in diameters from 2 to 6 ins., varying by half-inches, except that there is no 5½-in. size.

EXHAUST AND VENTILATING FANS.—The Specialty Mfg. Co., Indianapolis, Ind. Pamph.; 3½ × 6 ins.; pp. 14. Illustrated.

This pamphlet presents the forms of ventilating fans operated by water motors which are manufactured by this concern. These are made as small as 13 ins. fan diameter, with a direct connected water motor. Counter fans, floor fans and large exhaust fans are listed, together with water motors for operating them, and a variety of fan parts.

ENGINES AND PUMPING PLANTS.—Byron Jackson Machine Works, 625 Sixth St., San Francisco, Cal. Paper; 9½ × 6¾ ins.; pp. 100. Illustrated.

The specialties of this firm include horizontal and vertical single-valve, cross-compound engines, with automatic cut-off, and various forms of pumps for deep-wells, irrigation plants, dredging, water supply, etc. The pumps are mainly of the centrifugal type, and in some cases are placed in a deep shaft and driven by rope transmission from the engine on the surface.

THE TURNER WATER TUBE SAFETY BOILERS.—The Turner Engineering Co., Marion, O. Pamph.; 7½ × 7 ins.; pp. 32. Illustrated.

As in stated in its introduction, this pamphlet is published to give a concise description of a form of safety water tube boiler claimed by the maker to be the equal of any on the market in all the essential features of a modern water tube boiler. These points are set forth in some detail. The accompanying illustrations afford a clear idea of the construction.

HOUSE PAINTS.—New Jersey Zinc Co., 52 Wall St., New York. Paper; 7 × 4¼ ins.; pp. 16. Illustrated.

Under the title of "Paints and Architecture," Mr. Stanton Dudley has here given a concise and practical treatise on the characteristics and properties of pigments and paints for the especial benefit of architects. Starting with the proposition that the object of painting is "to protect and beautify," Mr. Dudley deals with the pigments and vehicles by the use of which an architect can expect permanence and beauty in his "color scheme." He deals with the means of detecting the presence of aniline dyes, and adulterants for oil; and discusses at considerable length white lead and zinc. He shows by illustrations the effect of weathering, sulphur fumes, etc., on these two pigments, and gives his reasons for preferring zinc white to the long used white lead in paints. He says good ready-made paints cannot be made without zinc white; but pure linseed oil is quite as essential for the vehicle, and cheap substitutes for this oil will largely counteract the best pigment.

DIRECT CONNECTED RAILWAY GENERATORS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Pamph.; 7 × 10 ins.; pp. 12. Illustrated.

This pamphlet describes the standard direct current engine generators built by the above-named company for street railway service. Such features as general design, field coils, armature core and winding, communicators, etc., are briefly enumerated.' This information is supplemented by lettered outline drawings and accompanying tables of dimensions.

STATIONARY AND PORTABLE ENGINES.—The Mansfield Machine Works, Mansfield, O. Pamph.; 9¼ × 6 ins.; pp. 40. Illustrated.

This pamphlet calls attention to the "Mansfield" engines of stationary and portable varieties. Some of the latter are mounted on wheels, and others intended for a more permanent class of work are semi-portable. A form of vertical boiler, portable equipment, is also shown. The concluding portion of the pamphlet considers head blocks, logging slides and circular saws.

ELECTRIC TRAVELING CRANES.—The Shaw Electric Crane Co., Muskegon, Mich. Pamph.; 12 × 9 ins.; pp. 93. Illustrated.

This catalogue is made up of a few pages of introductory remarks and general descriptive matter, and a number of full-page illustrations of the various types of electric cranes manufactured by this concern. Other illustrations representing machines in actual operation are also given.

THE DISPOSAL OF REFUSE AND GARBAGE.—W. F. Morse, 287 Fourth Ave., New York city. Paper; 6 × 9 ins.; pp. 22. Illustrated.

This pamphlet describes the Morse-Boulger garbage and refuse destructors, hospital destructors and steam sterilizing apparatus. There is included an illustrated description of the new refuse sorting and disposal plant recently installed to dispose of the paper, rags and refuse other than garbage and ashes of the city of Boston.

MOTOR CARRIAGES.—The Winton Carriage Co., Cleveland, O. Pamph.; 7 × 5 ins.; pp. 12. Illustrated.

This pamphlet describes in a necessarily abbreviated manner the good points of a type of motor vehicle which employs a gasoline motor, claimed by the makers to be all that could be desired. The accompanying illustrations show a simple and compact carriage and delivery wagon, and the testimonials seem to bear out the builders' claims.

THE AJAX BLUE BOOK.—The Ajax Manufacturing Co., Cleveland, O. Pamph.; 7⅝ × 4¾ ins.; pp. 115. Illustrated.

This pamphlet presents a series of illustrations of heading, forging and upsetitng machines, with descriptions which are scarcely more than general dimensions. Bending, bulldozing and hot pressed nut machines are treated in the same way. A number of dimensioned drawings of specimens produced by the various machines are given, and the pamphlet concludes with tables showing the amount of material required to make bolt heads, number of rivets per 100 lbs., etc.

AIR COMPRESSORS AND ROCK-DRILLS.—The Ingersoll-Sergeant Drill Co., New York. Paper; 5¼×3⅝ ins.; pp. 24; illustrated.

This little work contains an engraving of each of the various types of air compressors made by this company, with remarks as to their particular merits and appropriate use. An interesting table at the end gives in alphabetical order a list of about 170 processes and devices using compressed air. A similar little book of 20 pages illustrates and describes the several types of rock-drills and stone-channeling machines made by the Ingersoll-Sergeant Co.

STEEL DOOR HANGERS AND RAILS, AND CHAIN HOISTS.—The Chisholm & Moore Mfg. Co., Cleveland, O. Pamph.; 6 × 9 ins.; pp. 24. Illustrated.

This pamphlet describes the line of door hangers and rails manufactured by this concern for elevators, baggage cars, warehouses, etc. Several forms of door catch and fence pickets are shown, while a portion of the pamphlet is devoted to illustrations of electric and compressed air hoists and cranes. The supplementary pamphlet illustrates and describes in some detail the differential pulley blocks, electric and compressed air hoists and traveling cranes made by this concern.

SARATOGA THE BEAUTIFUL.—New York Central & Hudson River R. R. Co., General Passenger Department, Geo. H. Daniels, Agent, Grand Central Station, New York city. Pamp.; 4 × 9 ins.; pp. 56. Illustrated.

This is a very attractive booklet published by the passenger department of the New York Central Railway to call attention to Saratoga, N. Y., as a watering place. The prominent hotels and points of interest of this well-known resort are illustrated and briefly described. A portion of the pamphlet shows some of the scenery along the Hudson River, as it appears from the "Saratoga Limited," and several interior views of this speedy and comfortable train are given.

WATCHMAN'S TIME DETECTOR.—The Cleveland Electrical Manufacturing Co., Arthur B. Foster, General Manager. Paper; 9 × 6 ins.; pp. 32. Illustrated.

This catalogue is devoted to illustrating and describing the American Watchman's Time Detector, approved by all the mutual and standard insurance companies. Any one instrument may be connected with any number of stations at any distance; and the one dial keeps a full separate record for each watchman. And the record can only be made by operating the separate stations, so that no one watchman can make a record for others without being detected.

PELTON WATER WHEELS.—Pelton Water Wheel Co., 121-123 Main St., San Francisco, Cal. Catalogue in Spanish. Paper; 10¼ x 6⅝ ins.; pp. 80. Illustrated.

This company is fully awake to the trade possibilities of our "new possessions," and this catalogue is not only issued in Spanish and fully describes and illustrates the machines manufactured, but it also gives all instructions and tables in metrical measurements. Its general appearance is a telling argument in favor of the policy of pushing American manufactures among foreign nations by addressing them in their own language and speaking in dimensions with which they are familiar.

HOISTING ENGINES, PILE-DRIVERS, ETC.—Excelsior Iron Works Co., Cleveland, O. Paper; 12 x 9⅜ ins.; pp. 47. Illustrated.

The catalogue of this company covers a long list of machinery, tools and appliances used by contractors, quarrymen, miners, railways, steamship companies, etc. Among those illustrated and described we note the following: The Long car-dumping machine; the Long coal and ore car unloading machine; revolving steam traveling derricks; bottom-dump coal buckets; steel clam-shell buckets; hand traveling cranes; wrecking cars; derricks and quarry machinery; steam engines and boilers; frogs, switches and stands.

STREET SWEEPING AND PICKING-UP MACHINE.—Improved Street Sweeper Co., 601 German National Bank Building. Pittsburg, Pa. Paper; 7 x 4⅝ ins.; pp. 12. Illustrated.

The Monarch Pick-up Street Sweeping Machine is described as a "huge carpet sweeper" adapted to the cleaning of streets. The revolving broom is made of steel wires, which pick up and deposit in a cylindrical continuous casing all manner of refuse; the casing encloses the vital parts of the machine and a chain conveyor carries the sweepings into a tank on top of the machine. This tank holds one cubic yard and can be turned upside down and made to deposit the dirt in piles for removal in wagons. Letters are shown attesting to its satisfactory use in Pittsburg and Allegheny during last year.

MILL MACHINERY; THE "GRILL" PATENT DRYER.—C. O. Bartlett & Co., Cleveland, O. Pamphs.; 5¾ x 9 ins.; pp. 178; and 9 x 6¼ ins.; pp. 20. Both illustrated.

The first of these pamphlets is largely devoted to chain bucket conveyors, belt conveyors and other conveyors for such purposes as raising barrels. The remainder refers to engines, boilers, grinders and general milling machinery. The second pamphlet describes a form of revolving dryer which consists of a cylindrical case divided into four longitudinal compartments, to the inner faces of which are riveted small Z-bars. These form pockets from which the material spills, as the dryer revolves, and is thus continually exposed to the hot air which circulates through the cylinder. Other special drying apparatus is illustrated and described.

STEAM GAGES AND VALVES.—Crosby Steam Gage & Valve Co., Boston, Mass. Catalogue; 6¼ x 9¼ ins.; pp. 174. Illustrated.

This is a cloth-bound book, well illustrated and well printed, and of more than ordinary value owing to the explanations given of the principles and operation of the instruments illustrated. Various forms of steam, vacuum and pressure gages, revolution counters, gage tablets, test pumps and gage testers are shown. Considerable space is devoted to valves of different sorts. The Crosby steam engine indicator is described in detail, and a new form of electrical attachment for the simultaneous operation of several indicators is shown. Planimeters and their use are described, and a table of circumferences and areas of circles concludes the catalogue.

STEAM ENGINES AND BOILERS; AUTOMATIC ENGINES AND DIRECT CONNECTED HIGH SPEED ENGINES.—Watertown Steam Engine Co., Watertown, N. Y. Three pamphlets; 6 x 9 ins.; pp. 31, 16 and 24, respectively. Illustrated.

The first of these pamphlets illustrates and describes the types of slow speed automatic engines manufactured by this concern for heavy duty and several forms of high-speed automatic engine and both stationary and portable return tube steam boilers. Tables giving general dimensions accompany the text. Portable engines and agricultural engines are also included. The second pamphlet briefly discusses the advantages of the Watertown automatic engine and reproduces a number of indicator diagrams taken from engines of this class which have been in operation for some time. The third pamphlet contains several excellent illustrations of high speed engines direct connected to electric generators, both engine and generator being on the same bed plate. The accompanying text notes briefly the good points of these engines.

◆

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work. Place.	See Eng. News.
Apr. 13.	Steel highway bridge, Providence, R. I.	Mar. 30
	Advertised, Eng. News, Mar. 30 and Apr. 6.	
Apr. 13.	Steam heating, Athens, W. Va.	Mar. 30
Apr. 13.	Lock house, Kanawha City, W. Va.	Mar. 30
Apr. 13.	Repairing dredge, Charleston, S. C.	Mar. 30
Apr. 13.	Roads (67 miles), Crown Point, Ind.	Mar. 30
	Advertised, Engineering News, Mar. 30.	
Apr. 13.	Steam heating plant, Grand Junction, Colo.	Mar. 23
Apr. 13.	Steam heating, St. Paul, Minn.	Mar. 23
	Advertised, Eng. News, Mar. 23 and 30.	
Apr. 13.	Hydraulic canal, Great Bend, N. Y.	Mar. 23
	Advertised, Eng. News, Mar. 23 and 30.	
Apr. 13.	Water pipe, Chicago, Ill.	Apr. 6
Apr. 13.	Sewers, North Braddock, Pa.	Apr. 6
	Advertised, Engineering News, Apr. 6.	
Apr. 13.	Macadamizing three roads, Newark, N.J.	Apr. 6
Apr. 13.	Brick paving, and sewers, Meadville, Pa.	Apr. 6
Apr. 13.	City works supplies, Reading, Pa.	Apr. 13
Apr. 13.	Wharf, Cleveland, O.	Apr. 13
Apr. 14.	Street grading, Paterson, N. J.	Apr. 13
Apr. 14.	Sewers, Independence, Mo.	Apr. 6
Apr. 14.	Sewer pipe, etc., Minneapolis, Minn.	Apr. 6
Apr. 14.	Brick paving, etc., Waukesha, Wis.	Mar. 23
	Advertised, Eng. News, Mar. 23 and 30.	
Apr. 14.	Heating, etc., Louisville, Ky.	Mar. 16
Apr. 14.	Hall building, Bradford, England.	Jan. 19
Apr. 14.	Brick and steel sewers, Ottawa, Ont.	Mar. 30
Apr. 15.	Paving (14,800 yds.), Petersburg, Va.	Mar. 30
	Advertised, Engineering News, Mar. 30.	
Apr. 15.	Hospital buildings, Harrisburg, Pa.	Mar. 30
Apr. 15.	Apartment building, Osage, Ia.	Mar. 30
Apr. 15.	Steel bridge & abutments, Gainesville, N.Y.	Mar. 30
Apr. 15.	Water-works, Tinley Park, Ill.	Mar. 30
Apr. 15.	Water-works, Hintonburg, Ont.	Mar. 30
	Advertised, Engineering News, Mar. 30.	
Apr. 15.	Paving and sewers, Goshen, Ind.	Mar. 30
Apr. 15.	Highway, Colden, N. Y.	Mar. 30
Apr. 15.	Brick paving, Shamokin, Pa	Mar. 30
Apr. 15.	Cotton mills, Greensboro, N. C.	Mar. 30
Apr. 15.	Sewer material, etc., Honolulu, H. I.	Feb. 23
	Advertised, Eng. News, Feb. 23 and Mar. 2.	
Apr. 15.	Hospital building, Birmingham, Ala.	Mar. 9
Apr. 15.	Water-works, Forestport, N. Y.	Mar. 9
Apr. 15.	Branch sewer, Sandusky, O.	Mar. 16
Apr. 15.	Sewers, etc., Carrollton, Mo.	Mar. 16
Apr. 15.	Water-works, Golden, Colo.	Mar. 16
Apr. 15.	Paving, etc., and bonds, Carrollton, Mo.	Mar. 16
Apr. 15.	Pumping engine, Montgomery, Ala.	Mar. 23
	Advertised, Eng. News, Mar. 23 to Apr. 13	
Apr. 15.	Paving, Akron, O.	Mar. 23
Apr. 15.	Bridge, Hartford, Conn.	Mar. 23
	Advertised, Eng. News, Mar. 23 and 30.	
Apr. 15.	Ditch (30,000 cu.yds.), Wapakoneta, O.	Mar. 23
Apr. 15.	Paving, and curbing, Jamestown, N.Y.	Apr. 6
Apr. 15.	Macadamizing, Lees Summit, Mo.	Apr. 6
Apr. 15.	Stone arch bridges (6), Winnipeg, Man.	Apr. 13
Apr. 15.	Pipe sewers, Hyde Park, Mass.	Apr. 13
Apr. 15.	Pipe sewers, Harrisburg, Pa.	Apr. 13
Apr. 15.	Water pipe, Carson City, Nev.	Apr. 13
Apr. 15.	Curb, sidewalks, etc., Kansas City, Mo.	Apr. 13
Apr. 17.	Light fixtures, San Francisco, Cal.	Apr. 13
Apr. 17.	County building, Putnam, Conn.	Apr. 13
Apr. 17.	Street grading, Long Beach, Cal.	Apr. 13
Apr. 17.	Paving and sidewalks, Elwood, Ind.	Apr. 13
Apr. 17.	Sewer, St. Paul, Minn.	Apr. 13
Apr. 17.	Sewers, Sewickley, Pa.	Apr. 13
Apr. 17.	Light plant bonds, St. Paris, O.	Apr. 6
Apr. 17.	Electric plant, Winnipeg, Man.	Apr. 6
Apr. 17.	Garbage crematory, Louisville, Ky.	Mar. 23
Apr. 17.	Water-works, Lakeport, Cal.	Mar. 23
	Advertised, Engineering News, Mar. 23.	
Apr. 17.	Electric light franchise, Napa, Cal.	Mar. 23
Apr. 17.	Paving, Bridgeport, O.	Mar. 23
Apr. 17.	Brick paving, Toledo, O.	Mar. 23
Apr. 17.	Macadam roads, Risingsun, Ind.	Mar. 23
Apr. 17.	Brick paving, Portland, Ind.	Mar. 23
Apr. 17.	Cement, stone, etc., Marquette, Mich.	Mar. 23
	Advertised, Eng. News, Mar. 23 to Apr. 13.	
Apr. 17.	Public building work, San Francisco, Cal.	Mar. 16
Apr. 17.	Municipal building, North Braddock, Pa.	Mar. 30
Apr. 17.	Lumber, iron, etc., Portland, Me.	Mar. 30
Apr. 17.	Water and electric bonds, Monroe, La.	Mar. 30
Apr. 17.	Water mains, Goshen, Ind.	Mar. 30
Apr. 18.	School buildings, etc., San Carlos, Ariz.	Mar. 30
Apr. 18.	Trunk sewer, Bayonne, N. J.	Mar. 30
Apr. 18.	Sewers, etc., San Carlos Agency, Ariz.	Mar. 30
Apr. 18.	Arch culverts, Chicago, Ill.	Mar. 16
	Advertised, Eng. News, Mar. 16 to Apr. 6.	
Apr. 18.	Pipe culverts (9), Chicago, Ill.	Mar. 23
Apr. 18.	Paving, grading, etc., Jersey City, N.J.	Apr. 6
Apr. 18.	Court house, Madison, Minn.	Apr. 6
Apr. 18.	Electric plant, Carthage, Mo.	Apr. 6
Apr. 18.	Grading and brick paving, Mt. Vernon, N.Y.	Apr. 6
Apr. 18.	Grading and paving, St. Louis, Mo.	Apr. 6
Apr. 18.	Macadamizing, Hammond, Ind.	Apr. 6
Apr. 18.	Machinery and tools, Boston, Mass.	Apr. 13
Apr. 18.	Naval supplies, Portsmouth, N. H.	Apr. 13
Apr. 18.	Slag and screenings, Chicago, Ill.	Apr. 13
Apr. 18.	Brick sewers, Jersey City, N. J.	Apr. 13
Apr. 18.	Street grading, etc., Philadelphia, Pa.	Apr. 13
Apr. 18.	Paving, Buffalo, N. Y.	Apr. 13
Apr. 19.	Pipe tanning machine, Baltimore, Md.	Apr. 13
Apr. 19.	Park boulevarding, Chicago, Ill.	Apr. 13
Apr. 19.	Plank sidewalks, (44 Sts.), Chicago, Ill.	Apr. 13
Apr. 19.	Court house plans, Nashua, N. H.	Mar. 30
Apr. 19.	Extending water-works, Butte, Mont.	Mar. 30
	Advertised, Eng. News, Mar. 16 and 30.	
Apr. 20.	Electric plant, Genoa, Neb.	Mar. 30
Apr. 20.	Air cylinders, etc., Montgomery, Ala.	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 20.	
Apr. 20.	Water-works, etc., Greenville, Cal.	Mar. 30
Apr. 20.	Excavating, New Orleans, La.	Mar. 23
Apr. 20.	Asylum building, Whitehall, Wis.	Apr. 6
Apr. 20.	Electric plant, Peterboro, England	Apr. 6
Apr. 19.	Steel signs, Newport, Ky.	Apr. 13
Apr. 20.	Church building, Sycamore, Ill.	Apr. 13
Apr. 20.	School building, Edgewood, Pa.	Apr. 13
Apr. 20.	Sewers, Dayton, O.	Apr. 13
Apr. 20.	Broken stone, etc., New York.	Apr. 13
Apr. 20.	Sewers, etc., Cambridge, O.	Apr. 13
Apr. 20.	Water pipe, hydrants, etc., New York	Apr. 13
Apr. 20.	Roads (15⅓ miles), Rockville, Ind.	Apr. 13
Apr. 21.	Macadam roads, Rockport, Ind.	Apr. 13
Apr. 21.	Police station, Taunton, Mass.	Apr. 13.
Apr. 21.	School building, Milton, Mass.	Apr. 13
Apr. 21.	Sewers, West Hammond, Ill.	Apr. 13
Apr. 21.	Grading and macadamizing, Paterson, N.J.	Apr. 13
Apr. 21.	Plate girder and lift bridges, Albany, N. Y.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
Apr. 21.	Street work (30 streets), St. Louis, Mo.	Apr. 6
Apr. 22.	Race track, Nazareth, Pa.	Apr. 6
Apr. 22.	Electric lighting, Jeffersonville, Ind.	Apr. 6
Apr. 22.	Cement walk, Irvington, Ind.	Apr. 6
Apr. 22.	School building, Springfield, Minn.	Apr. 13
Apr. 22.	Race track, Nazareth, Pa.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
Apr. 23.	Electric plant, Port Louis, Mauritius	Apr. 6
Apr. 23.	Steel bridge, Raleigh, N. C.	Mar. 23
Apr. 24.	School building (No. 183), New York	Apr. 13
Apr. 24.	School building, Dayton, O.	Apr. 13
Apr. 24.	Paving, curbing and grading, Vanwert, O.	Apr. 13
Apr. 24.	Street work, Muncie, Ind.	Apr. 13
Apr. 24.	Grading and surfacing, Revere, Mass.	Apr. 13
Apr. 24.	Dredging harbor, New York, N. Y.	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 20.	
Apr. 24.	School building, Euclid, O.	Apr. 6
Apr. 24.	Two iron bridges, Huntington, W. Va.	Apr. 6
Apr. 25.	Church building, Woonsocket, R. I.	Apr. 6
Apr. 25.	Road improvement, Bondhill, O.	Apr. 6
Apr. 25.	Park bonds, Cleveland, O.	Mar. 23
Apr. 25.	Coal shed, etc., St. Louis, Mo.	Apr. 13
Apr. 25.	Grading, paving, etc., Greenville, Pa.	Apr. 13
	Advertised, Eng. News, Apr. 13 and 20.	
Apr. 25.	Office building, Monticello, Ia.	Apr. 13
Apr. 26.	Railway and highway bridges, Chicago, Ill.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
Apr. 26.	Sewers (8¾ miles), Cohoes, N. Y.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
Apr. 26.	Dormitory buildings, Poplar, Mont.	Mar. 30
Apr. 26.	Dredging two channels, New York	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 20.	
Apr. 26.	Water-works, etc., Fort Peck, Mont.	Mar. 30
Apr. 26.	Dredging harbor, Cleveland, O.	Mar. 30
	Advertised, Eng. News, Mar. 30 and Apr. 6.	
Apr. 27.	Sewer system, Tybee Island, Ga.	Apr. 6
Apr. 27.	Pier of aqueduct bridge, Georgetown, D.C.	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 20	
Apr. 27.	Removing reservoir, New York, N. Y.	Apr. 13
Apr. 27.	U. S. building repairs, Detroit, Mich.	Apr. 13
Apr. 27.	School building, Passaic, N. J.	Apr. 13
Apr. 27.	Electric lighting, Mechanicsburg, Pa.	Apr. 13
Apr. 27.	Pump, boilers, etc., Gravesend, England	Apr. 13
Apr. 27.	Sheet asphalt paving, Meriden, Conn.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
Apr. 28.	Water tanks, etc., Pipestone, Minn.	Apr. 6
Apr. 28.	Broken stone, New York, N. Y.	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 20.	
Apr. 28.	Reservoir, Cincinnati, O.	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 27.	
Apr. 28.	Water mains, Cincinnati, O.	Mar. 30
	Advertised, Eng. News, Mar. 30 to Apr. 27	
Apr. 29.	Building plans, New Haven, Conn.	Mar. 23
Apr. 29.	Hospital building, Carthage, O.	Apr. 13
May 1.	School building, Schenectady, N. Y.	Apr. 13
May 1.	Brick and pipe sewers, Logansport, Ind.	Apr. 13
May 1.	City hall, Lake City, Minn.	Apr. 13
May 1.	Brick paving, Benwood, W. Va.	Apr. 13
May 1.	Interior building work, St. Paul, Minn.	Apr. 13
May 1.	School bonds ($67,000), Council Bluffs, Ia.	Apr. 13
May 1.	Bridge substructure, Winchester, England	Apr. 13
May 1.	Market hall, Stockton-on-Tees, England	Apr. 13
May 1.	Water-works and bonds, College Hill, O.	Apr. 13
May 1.	Water bonds, Stayner, Ont.	Apr. 13
May 1.	Sidewalks, Springfield, O.	Apr. 13
May 1.	Brick paving, Bradford, Pa.	Apr. 13
May 1.	Bonds, Cobourg, Ont.	Mar. 30
May 1.	Electric and water plant, Cullman, Ala.	Mar. 30
May 1.	Rip-rap embankment, Two Harbors, Minn.	Apr. 6
	Advertised, Eng. News, Apr. 6 to 27.	
May 2.	Electric lighting, Perth, W. Australia	Apr. 6
May 2.	Dredging, Wallabout channel, New York	Apr. 6
	Advertised, Eng. News, Apr. 6 to 27.	
May 3.	Dredging, Gowanus Creek, New York	Apr. 6
	Advertised, Eng. News, Apr. 6 to 27.	
May 3.	Sewerage system, Sauk Centre, Minn.	Mar. 30
	Advertised, Eng. News, Mar. 30 and Apr. 6.	
May 2.	Work shop, Shoshone Agency, Wyo.	Apr. 13
May 4.	Asphalt and brick paving, Ft. Wayne, Ind.	Apr. 13
May 4.	Shop building, Carson, Nev.	Apr. 13
May 5.	Brick sewer, Bridgeport, Conn.	Apr. 13
	Advertised, Eng. News, Apr. 13 and 20.	
May 6.	Levee work, West Memphis, Ark.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
May 6.	Lock and dam, St. Louis, Mo.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 8.	School building, Pima, Ariz.	Apr. 13
May 8.	Water franchise, Orange, Cal.	Apr. 13
May 8.	Dredging, Peekskill, N. Y.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 9.	Feeder canal (13 miles), Tampico, Ill.	Apr. 6
	Advertised, Eng. News, Apr. 6 to May 3.	
May 10.	Dredging, New London, Conn.	Apr. 13
	Advertised, Eng. News, Apr. 13. to May 4.	
May 10.	Electric plant, Galt, Ont.	Apr. 13
May 10.	Oil tanks (4), Montreal, Que.	Apr. 13
May 10.	Concrete superstructure, Buffalo, N.Y.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 11.	Ice plant, and cold storage, West Point, N.Y.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 13.	Dipper dredges (2), Chattanooga, Tenn.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 13.	Electric plants (2), St. Helena Isl., N. C.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 15.	Railway, Chili	Apr. 13
May 15.	Sewers, Medford, Ore.	Mar. 30
May 18.	Dredging ship channel, Baltimore, Md.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.	
May 22.	Wellsbach gas lamps, Vincennes, Ind.	Apr. 13
May 22.	Public lighting, Vincennes, Ind.	Apr. 13
May 25.	Sewer system, Johannesburg, S. Africa	Mar. 9
June 1.	Electric plant, Prineville, Ore.	Apr. 13
May 31.	Armor plate, Washington, D. C.	Apr. 6
May 31.	Plate girder railway bridge, Joliet, Ill.	Apr. 13
	Advertised, Engineering News, Apr. 13.	
June 1.	Plans for market, Leeds, England	Feb. 16
June 3.	Building, Harrogate, England	Apr. 13
June 10.	Timber dry-dock, Mare Island, Cal.	Apr. 13
June 30.	Electric r'y (23 miles), Shanghai, China.	Mar. 2
	Advertised, Eng. News, Nov. 17 to Dec. 8.	
Oct. 1.	Electric street railway, Moscow, Russia	Mar. 9
No date.	Water-works, Napoleonville, La.	Apr. 6
No date.	Railway (50 miles), Michigan	Apr. 13
	Advertised, Engineering News, Apr. 13.	

RAILWAYS.

ALABAMA & TOMBIGBEE.—Reports state that seven miles of grading and six miles of track-laying have been completed on the extension of this line from Fulton to Lower Peach Tree, 14 miles. Work is being done by the day under the direction of the company. G. R. Hannon, Gen. Mgr.; G. S. Kellan, Ch. Engr., both of Fulton, Ala.

BALTIMORE & OHIO.—We are informed that the work of preparing the roadway for a second track from Bellaire to Spencers, O., a distance of 33 miles, is soon to begin; and that west of Newark, O., there are several heavy grades to be cut down during this season.

BANGOR & AROOSTOOK.—Preliminary surveys have begun for an extension of this line from Caribou to Van Buren, Me., 28 miles. It is also said that three new steel bridges are being built beyond Oldtown, and a steel viaduct several hundred feet long being built at Bunker Brook, near Greenville; besides this there will be a number of general improvements on the line when the weather permits. M. Burpee, Ch. Engr., Houlton, Me.

BIG ROCK.—This company was incorporated in Arkansas, April 5, with $15,000 capital stock, to build a standard-gage line from the Junction of Newton Ave. and Hays St., Little Rock, Ark., to Fort Logan H. Roots. Arthur Neville and J. H. Hollis are incorporators.

CAROLINA & NORTHERN.—Contracts will soon be let, according to official reports, for grading this proposed line from Lumberton to Marion, S. C., 38 miles. Rails have been purchased. Joseph H. McRee, Wilmington, N. C.

CHINA.—Reports state that the American-China Development Co. has completed the surveys for its proposed railway from Hankow to Canton. Wm. Barclay Parsons, Ch. Engr., 22 William St., New York.

CHESTER, PERRYVILLE & STE. GENEVIEVE.—Incorporated in Missouri, with $300,000 capital stock, to control and operate the Chester, Perryville, Ste Genevieve & Farmington R. R., about 20 miles in length, from Clearyville to Perryville. L. B. Houck, Pres., Cape Girardeau, Mo.

CHICAGO, MILWAUKEE & ST. PAUL.—We are informed that the Ferguson Contracting Co., 69 Wall St., New York, and 753 Monadnock Block, Chicago, has the contract for about 1,000,000 yds. of cut-offs, second-track and grade betterments on this system between Riggs station and Marion, Ia. D. J. Whittemore, Ch. Engr., Chicago, Ill.

CHILE.—Bids are asked until May 15, according to reports, for the building of important lines in the south of Chile to unite Valdivia with the main system.

COLUMBUS, LIMA & MILWAUKEE.—Official reports state that a large force of men is at work grading and laying track for this company near Gower, O., eight miles from Lima. It is expected to run the first train between Defiance and Lima, 40 miles, on May 15, and between Defiance and Columbus on Oct. 1. The latter city will be entered via West Mansfield over the tracks of the Toledo & Ohio Central Ry. An extension to Sagatuck on Lake Michigan is also contemplated, making the completed system about 314 miles in length. Andrew Bruon, Ottawa, Ohio, is the general contractor for present work. J. G. W. Cowles, Pres., Cleveland, O.; C. T. Hobart, Ch. Engr., Defiance, O.

COPPER RANGE.—C. E. Loss & Co., Pullman Bldg., Chicago, are reported to have been awarded the contract for constructing this line from Houghton southwest to Rockland, Mich., 45 miles. The maximum grade is 2%, and the maximum curve 6°, with a curve of 14° on some switches. Thomas Appleton, Ch. Engr., Houghton, Mich. This work will be sub-let, as stated in our advertising columns.

DETROIT & NORTHERN.—Luther S. Cushing, Endicott Bldg., Pres., St. Paul, Minn., informs us that surveys have just been completed and estimates of cost are being made for this line from Mount Clemens to Marine City, via New Baltimore and Fair Haven, Mich., 21 miles. T. H. Bacon, Ch. Engr., Marine City, Mich.

DOTHAN, HARTFORD & FLORIDA.—Incorporated in Alabama, with $110,000 capital stock, to construct a line from a point near Dothan, Ala., to Florida, via Hartford. A. H. Peacock, Dothan, and W. J. Perkins, Hartford, Ala., are incorporators.

EGYPT.—Reports from Cairo, Egypt, state that the government is considering a scheme for a railway through the Eastern Soudan, probably from Khartoum, on the Nile, to Suakim, on the Red Sea, via Kassala, in Nubia, the design being to secure the Abyssinian traffic. It is reported that 36 engines for the Uganda line are being built in the United States.

ERIE.—C. W. Buchholz, Ch. Engr., 21 Cortlandt St., New York, informs us that this company is constructing third and fourth tracks between Ramseys, N. J., and Suffern, N. Y., a distance of four miles, and that the contract for the graduation and masonry has been awarded to the Sandford & Stillman Co., Jersey City, N. J.

FORT PAYNE & WINCHESTER.—L. Garza, 13 South Palafox St., Pensacola, Fla., and J. S. Walton, Delta, Fla., are said to be interested in this proposed line from Fort Payne to Winchester, Fla., 60 days.

GAINESVILLE & GULF.—This company has begun the extension of its lines from Gainesville north about 23 miles to the Georgia Southern & Florida Ry. at Sampson City, Fla. V. J. Herlong, Pres. and Gen Mgr., Gainesville, Fla.

GALVESTON, HOUSTON & NORTHERN.—Incorporated with $500,000 capital stock, to build from Houston to Galveston, Tex., 60 miles, as projected by the old Galveston, La Porte & Houston Ry. Co. Chas. S. Broadhead and Delacy Chandler are incorporators.

KANSAS CITY, ST. JOSEPH & OMAHA.—This company will be incorporated in Missouri, according to reports, with $2,500,000 capital stock, to build an air line from Kansas City to Omaha, 52 miles in length, or 10 miles shorter than any existing road. It is said that the bonds have all been placed in London and Paris. J. H. Pickering, Kansas City, Mo.; C. R. Berry, St. Joseph, Mo., and C. D. Zook, Ore, Mo., are incorporators.

LEETONIA.—J. L. Snyder, Gen. Supt., Leetonia, Pa., informs us that construction began April 1 on this proposed steam line from Tiadaghton to Leetonia, 8½ miles. Work is being done by the company with 36 men, but it is expected to have 100 men on the grading before April 15. As three miles of the old Tiadaghton & Fahnastalk Ry. is being used, there are but 5½ miles of new road to be built. C. B. Farr, Pres., Williamsport, Pa.; H. B. Norton, Engr., Ridgway, Pa.

NEBRASKA, WYOMING & WESTERN.—Incorporated in Nebraska, April 9, with $1,000,000 capital stock, to build from Alliance, Neb., to the North Platte River, in Cheyenne county, near Camp Clark, and thence through Wyoming to Idaho. G. W. Holdrege and J. F. Taylor, of Omaha, Neb., are incorporators.

NORTH & SOUTH CAROLINA.—Chas. O. Haines, Ch. Engr. and Gen. Mgr. of Atlantic & Danville Ry. Co., Norfolk, Va., informs us that the contract has been let for the first section of this new line to copper mines in North Carolina to T. M. Lindsay, Lynchburg, Va., who will begin work at once.

PENNSYLVANIA.—Drake & Stratton, Pittsburg, Pa., are reported to have received the contract for the construction of a 1,150-ft. tunnel on the main line east of Tyrone, Pa.; estimated cost, $200,000. Work is to begin at once and to be completed before the end of the year. It is said that other contracts of a similar nature will be let during this year.

PORT ANGELES EASTERN.—Isaac C. Atkinson, Vice-Pres. and Gen. Mgr., Port Angeles, Wash., informs us that two corps of engineers are now in the field for this proposed line from Port Angeles to Olympia, via Dungeness, Junction City, Point Discovery, Hoodsport and Skokomish, Wash., 100 miles. Location has been completed for about seven miles, and a crew is grubbing and cleaning and will soon begin grading. The company will be ready to let contracts for grading, trestle and bridge work on a part of the line any time after April 10. Chas. A. Cushing, Pres.; E. A. FitzHenry, Ch. Engr., both of Port Angeles.

RIO GRANDE WESTERN.—We are informed that grading contracts have been let for 15 miles from Provo City up the Provo Canyon, to Deal Bros. & Mendenhall and H. & T. Roylance. W. J. Palmer, Pres., Colorado Springs, Colo.; E. J. Yard, Ch. Engr., Salt Lake City, Utah.

RUTLAND-CANADIAN.—About 500 men are said to be at work on the construction of this new line from Rutland, Vt., to a connection with the Ogdensburg & Lake Champlain Ry. A stone bridge 3¼ miles in length, is in process of construction. O'Brien & Sheehan, 258 Broadway, New York, who hold the general contract, have placed on the islands twelve steam drills, six hoisting machines and four boilers, and have also a number of steam shovels at Plattsburg. John W. Burke, Ch. Engr., 45 Broadway, New York, and South Hero, Vt.

ST. LOUIS & NORTHERN SHORT LINE.—Baxter L. Brown, Principal Asst. Engr. of Construction, Geneseo, Ill., informs us that the location has been made and most of the right of way obtained for this proposed line being built from Peoria to Clintin, Ia., via Kewanee and Geneseo, Ia., 100 miles, under the supervision of the Laclede Construction Co., Security Bldg., St. Louis. The contract has been let to the Warren-Scharf Asphalt Paving Co., W. G. Root, Supt., Niagara Bldg., Peoria, Ill. Most of the work has been again sub-let, and some outfits are on the field waiting for the ground to thaw. W. D. Taylor, Ch. Engr., 612 Niagara Bldg., Peoria, Ill.

SALVADOR.—Consular reports state that the Government of Salvador has entered into a contract with the Central Public Works Co., Ltd., of London, for the construction and operation of the Acajutla & Santa Ana Ry. and the Acajutla & San Salvador Ry.

SEATTLE & SAN FRANCISCO R. R. & TRANSPORTATION.—This company has been incorporated in Washington with $3,000,000 capital stock, to build from Seattle to the coal fields in the vicinity of Black Diamond, about 30 miles to the southeast, with possible further extensions. W. A. Whitworth, Ch. Engr., New York Block, Seattle, Wash.

SILVERTON, GLADSTONE & NORTHERN.—Incorporated in Colorado, April 6, with a capital stock of $200,000, to construct a line from Silverton to Lake City, Colo., 30 miles, during the coming summer. The general offices will be at Silverton, Colo., and Boston, Mass.

TEXARKANA & FORT SMITH.—Robert Gillham, Ch. Engr., Kansas City, Mo., informs us that the location has been made, most of the right of way obtained and the capital secured for this proposed line from Lemon to Orange, Tex., 13 miles. Bids will soon be let.

TEXAS NORTHERN.—This company has been chartered to build from Anderson to Stoneham, Tex., on the Gulf, Colorado & Santa Fe Ry., 12 miles. Lieutenant McNair, Engr.

TRANS-APPALACHIAN.—This company has been incorporated in North Carolina to build a line from the East Tennessee & Western Carolina R. R., at Cranberry, N. C., southeast about 75 miles to the Seaboard Air Line. H. L. Miller, Washington, N. C., and W. E. Walton, Morgantown, N. C., are incorporators.

TREDEGAR MINERAL.—J. W. Burke, Pres., Jacksonville, Ala., informs us that the right of way has been obtained for the proposed 10 miles of steam railway from Tredegar Junction, Ala., and that it is expected to finish the work during the coming season.

UNION PACIFIC.—J. B. Berry, Ch. Engr., Omaha, Neb., informs us that the 48 miles of cut-offs to be built by Kilpatrick Bros. & Collins, Beatrice, Neb., in Wyoming, will be between Laramie and Rawlins, and will allow a saving of about 17 miles in distance, with better grades and alinements than at present.——Reports state that this company is running lines for a proposed extension from Sidney, Neb., northwest along the North Platte River into Wyoming.

VANDALIA.—Contracts will soon be let, according to reports, for the erection of seven interlocking plants on the division between Terre Haute, Ind., and St. Louis. F. T. Hatch, Ch. Engr., Terre Haute, Ind.

WYOMING & BLACK IHLLS.—This company has been organized in Wyoming with $3,000,000 capital stock, to build a railway from Merino, Wyo., to Deadwood and Belle Fourche in the Black Hills, S. Dak., which will form a connecting link with the Chicago, Burlington & Quincy, the Burlington & Missouri River and the Fremont, Elkhorn & Missouri Valley railways, to be about 72 miles in length. Samuel L. Snow, Pres., 27 State St., Boston, Mass.

YORK SPRINGS.—J. H. Dobbling, York, Pa., informs us that he has been awarded the contract for grading, masonry work and track-laying for this proposed line from Dillsburg to York Springs, Pa., nine miles. Work has been commenced and will be completed by July 1. George Trostle, Pres., and Geo. A. Trimmer, Gen. Mgr., both of York Springs, Pa.; Chauncey Ives, Ch. Engr., Chambersburg, Pa. Reports state that this will serve as a feeder to the Cumberland Valley R. R.

STREET AND ELECTRIC RAILWAYS

LACONIA, N. H.—Ties have been distributed and rails ordered for the extension of the Laconia St. Railway to The Weirs. A new power house, 50 × 35 ft., will be erected, and two gasoline engines will be used. Lewis S. Pierce, Supt.

WESTBROOK, ME.—The Westbrook, Windham & Harrison Electric Ry. Co., whose charter was recently extended by the Maine Legislature, has been reorganized with the intention of resuming construction work as soon as the snow disappears. About 10 miles of grading was done last year.

BOSTON, MASS.—The Boston Electric Ry. Co. is stated to have placed contracts for materials for its entire main line of elevated structure from Roxbury to Charlestown, excepting station. The last contract let was for $400,000 worth of steel, to be erected before March 1, 1900. G. A. Kimball, Ch. Engr., 101 Milk St.

COTTAGE CITY, MASS.—John A. Duggan, representing the Martha's Vineyard St. Ry. Co., is said to be promoting the construction of a line between this city and Edgartown.

GLOUCESTER, MASS.—The Gloucester St. Ry. Co. is making extensive improvements to its Washington St. power house. H. E. Reed, Supt.

GREENFIELD, MASS.—Frank E. Lowe, Pres. of Greenfield & Turners Falls St. Ry. Co., Greenfield, informs us that most of the stock has been subscribed for the new Montague Electric St. Ry. Co., which is being organized with $15,000 capital stock to build two miles of street railway to Montague Center, and which, when completed, will be leased to the Greenfield & Turners Falls Co. D. P. Abercrombie, Jr., Greenfield.

NEWBURYPORT, MASS.—The Georgetown, Rowley & Ipswich St. Ry. Co. has been granted a franchise to build in this city, track to be laid before Sept. 1. This company has also been granted the right of way through Ipswich. E. B. Fuller, Haverhill, Mass.

NORFOLK, MASS.—The Norfolk-Bristol St. Ry. Co. has been organized, with $125,000 capital stock, to build a line from Easton to Holbrook, via Stoughton and Randolph, 11¾ miles. Wm. S. Bartlett, Belmont, Mass.; Newell D. Atwood, Stoughton, Mass., and others are interested.

WALTHAM, MASS.—A. E. Viles, 53 Tremont St., Boston; Winthrop Coffin, 60 State St., Boston, and others announce their intention to incorporate the Waltham, Weston & Wayland St. Ry. Co., with a capital stock of $60,000, to build from Waltham to Weston and Wayland, six miles.

SHELTON, CONN.—About one-half of the grading has been completed for the extension of the Shelton St. Ry. from Shelton to Paradise Green. Blakeslee & Sons, New Haven, are said to have about 200 men at work on the route. A. Radel, Pres.

NEW YORK, N. Y.—Press reports state that the Union Ry. Co., which is controlled by the Third Ave. R. R. Co., is planning to extend its 161st St. line to connect with the Manhattan Elevated R. R. at 8th Ave. and 155th St., thus necessitating the crossing of the Jerome Ave. viaduct.

GRAND ISLAND, N. Y.—Edgar B. Jewett, Jas. C. Curtiss and N. W. Norton are reported to be interested in the construction of a trolley line on Grand Island.

ROME, N. Y.—The Rome City St. Ry. Co., operating 6.7 miles of horse car lines, has voted to increase its capital stock from $50,000 to $150,000, and to adapt its present plant to the use of Hardie compressed air motors.

BRIDGETON, N. J.—It is reported that work is about to begin on the extension of the Bridgeton & Millville Traction Co.'s lines from Fairton to Cedarville. The supplies are about to be delivered, including 420 tons of steel rails from the Cambria Iron Works, Johnstown, Pa.

PLAINFIELD, N. J.—L. W. Serrell, Jr., Plainfield, is stated to have received the contract for constructing a trolley line from Plainfield to Elizabeth, 12 miles, and expects to begin work at Scotch Plains.

BELFAST, PA.—C. H. Cox, Butztown, Pa., informs us that the surveys are being made for the proposed Wind Gap & Nazareth St. Ry., incorporated April 3, as stated in our last issue, to build eight miles of electric railway from Belfast to Nazareth, via Wind Gap. The contract is held by the Worcester Construction Co. C. A. Richardson, Pres., 53 State St., Boston, Mass.; W. H. Sawin, Ch. Engr., Bethlehem, Pa.

ERIE, PA.—C. M. Stephens has completed a survey for the proposed extension of the Erie Rapid Transit Co.'s system to Cambridge, via Edinboro, a distance of 126 miles; maximum grade 4%. J. F. Downing and Perry Gibson, Erie, are said to be interested.

MARIETTA, GA.—The council has granted a franchise to the Collins Park & Belt R. R., of Atlanta, to build in this city. Reports state that the contract has been let and that construction will begin in May. About 11½ miles of line will have to be built, or from Bolton to Marietta. C. J. Simmons, Pres.

SCOTTDALE, PA.—Geyer & Mowbray, Greensburg, Pa., have completed plans for the power house, 90×45 ft., for the proposed Mt. Pleasant, Scottdale & Connellsville Electric St. Ry. W. E. Tustin, Pres., Bissell Block, Pittsburg.

WASHINGTON, D. C.—It is stated that rails have been ordered for an extension of the Georgetown & Tenleytown Electric Ry. from Bethseda Park to Rockville, eight miles. Grading is already in progress. It is stated to be the intention of the present owners of the Belt and Anacostia street railways in the near future to equip their lines with the underground electric system. The entire issue of bonds, $2,225,000, has been subscribed for. Frederick C. Stevens may be addressed.

PARIS, TENN.—The Paris Electric Street Car Co. has been organized by J. C. Sweeney, W. A. Carter and others, of Paris, with proposed capital stock of $100,000, to build a line in Paris.

CINCINNATI, O.—Reports state that the Cincinnati & Aurora St. Ry. Co. has let the contract for the construction of the first section of the new line, from Anderson's Ferry to Fernbank, six miles, and that contracts will soon be let for second section to Elizabethtown, ten miles farther. E. F. Layman, Engr.

GALION, O.—The Ohio Central Traction Co. is reported to have been incorporated, with $225,000 capital stock, to build a street railway in Galion. I. A. Kelsey and Dennis H. Blakeslee, of Galion, are incorporators.

DAYTON, O.—Bruno Ritty, Dayton, is reported to have begun track-laying for the Dayton & Eastern Traction Co.'s line between Xenia and Dayton.

JACKSON, MICH.—The Jackson & Adrian Electric Ry. Co. has been organized with a capital stock of $50,000 by H. C. Smith, Adrian; Charles A. Blair, Jackson, and others. It is proposed to build between Adrian and Jackson.

MUSCATINE, IA.—It is reported that L. W. Prior, Cleveland, O., has bought an interest in the Muscatine Electric Ry. Co., and that new extensions and improvements will be made. Paul Seevers, Mgr. and Supt.

BUTTE, MONT.—The Silver Bow Ry. Co. is reported to contemplate building an electric line to the Columbia gardens, about four miles east of Butte. W. A. Clarke and W. L. Hoge are interested.

CLAYTON, MO.—Reports state that work is progressing rapidly on the Creve Coeur Lake extension of the Clayton & Forest Park Electric Ry., west of Clayton. The trolley wire has been strung from Clayton to the Price road, and work trains are now at that point. The contract for the grading and track-laying from that point to Creve Coeur Lake has been let, and the line is to be in operation to the lake by midsummer.

VICTORIA, B. C.—The owners of the Wellington Extension Mine, at Oyster Bay, have let a contract to George C. Hinton & Co., Victoria, for the construction of a complete tramway and electric light system, to cost at first about $60,000.

LONDON, ENGLAND.—The board of trade has confirmed ten orders made by the light railway commissioners authorizing the construction of the following light railways: From the esplanade at Ventnor to the Isle of Wight Ry. Co.'s station at Ventnor; from Trowse, Norfolk, to Bessles, Suffolk; from Liverpool to Prescot; from Cheddleton Junction, on the North Staffordshire Ry., to Caldon Low and Hulmne End; from Didcot to Wallington; from Grimsby to Saltfleetby, with a branch to Cleethorpes; from Stourbridge to Kinver; from Haxey, Lincolnshire, to Crowe and Marshlands, with branches; from Barking Town to the Beckton Gasworks; and several short railways in the county of Northumberland and in the townships of Chirton, North Shields, Tynemouth, Cullercoats, and the urban districts of Whitley and Monkseaton.

DUBLIN, IRELAND.—Bids are asked until April 20 for wire, rolling stock, battery and booster and overhead construction work on the electric tramway between Sutton and Howth, near Dublin, for the Great Northern Ry. Co. of Ireland. T. Morrison, Secy., Amiens St., Terminus, Dublin.

ELECTRIC LIGHT AND POWER.

SOUTH NORRIDGEWOCK, ME.—Wm. Ayer, Supt. Somerset Traction Co., Skowhegan, Me., and two Philadelphia parties are reported as interested in a proposed water power plant about three miles from here.

BOSTON, MASS.—The council has voted to appropriate $4,000 for an electric plant at Rainsford Island.

BROOKLINE, MASS.—The selectmen have been authorized to make a new contract for electric lighting for a term of years.

DEDHAM, MASS.—The committee has reported against the municipal ownership of the plant of the Dedham Electric Light Co. Chester A. Reed, Chas. Warren and Jas. T. Clark are on the committee.

WARREN, MASS.—W. P. Canning and Edward Fairbanks are on the committee investigating the question of a municipal plant.

WEST SPRINGFIELD, MASS.—This place is reported to have voted to build a plant.

BUFFALO, N. Y.—The following bids were received April 8 for constructing a plant in the new 74th Regiment armory, on Niagara St.: F. P. Little, $14,560; J. C. Stearns & Co., $14,015; Robertson & French Electric Co., $13,100; McCarthy Bros. & Ford, $11,995, accepted.

HERKIMER, N. Y.—David Cronin, Syracuse, N. Y., has been awarded the contract for furnishing the machines and for building a plant.

LE ROY, N. Y.—The Le Roy Hydraulic Electric Co. has submitted three propositions to light the streets with electricity.

LYONS, N. Y.—The Lyons Electric Light & Power Co. is preparing to furnish power. It is likely that the company will soon add an alternating current machine, which will furnish heat, light, arc and incandescent. Address Jacob Strauss or Jno. Jordon.

OSWEGO, N. Y.—Local papers state that bids will be asked in the summer for lighting the city for five years. The contract with the People's Electric Co. expires Feb. 20, 1900. A new plant will cost about $75,000. The city pays $17,000 a year for lighting.

PHILMONT, N. Y.—F. G. Simmons, of the Philmont & Claverack Electric Light & Power Co., writes us that it has not been fully decided upon what machinery will be used. No contracts have been let. The plant will have a capacity for furnishing 25 2,000-c. p. arc and 1,200 16 and 25-c. p. incandescent lights; estimated cost, $10,000. Roswell H. Gardner, Engr., North Adams, Mass.

RICHMONDVILLE, N. Y.—R. H. Bannings writes us that this place has voted against building a plant.

SAG HARBOR, L. I.—Robt. K. Story, New York, has been granted a franchise to build and operate a plant.

SENECA FALLS, N. Y.—Press reports state that the Seneca Light & Power Co.'s property at Seneca Falls and Waterloo was sold at foreclosure April 8. James A. Van Voast, attorney for the General Electric Co., bid in the property for $10,000.

HADDONFIELD, N. J.—The people of Haddon township have voted to appropriate $2,000 for lights.

WILDWOOD, N. J.—L. B. Baker writes us that two parties are competing for a franchise for putting in a plant. The matter will soon be decided.

PERKASIE, PA.—An election will be held June 6 to vote on the question of issuing bonds for a plant.

CONSHOHOCKEN, PA.—It is stated that the Electric Co. of America has purchased the properties of the Conshohocken gas and electric light companies. The gas company's capital stock is $75,000, and that of the electric light company, $35,000. It is stated that the purchasers will erect a new power plant.

HOMESTEAD, N. Y.—Mellon Bros., bankers, Smithfield St., Pittsburg, have purchased the plant of the Homestead Electric Light & Power Co. It is proposed to light this city, Braddock, Duquesne and McKeesport.

MECHANICSBURG, PA.—Bids are asked until April 27 for lighting the streets with electricity for five years. C. W. Owen, Chn. Com.

PHILADELPHIA, PA.—Councilman W. H. Brown has introduced a resolution appropriating $250,000 for a plant at the Ninth Ward gas works.

SOUTH BETHLEHEM, PA.—The borough council has awarded a 5-year contract for street lighting to Hoffman & Lauer, at 24½ cts. an arc light a night.

DOVER, DEL.—The governor has approved the bill for a plant to cost $12,000. We are informed that the town has 10 miles of streets, and that the plant will have 40 arc lights and be operated by steam. John Hatton and E. Cooper may be addressed.

WILLIAMSPORT, MD.—We are informed that the matter of building a plant is in the hands of the board of supervisors, consisting of L. T. Byron, Pres.; Jos. L. Motts, Jno. H. Hoffman and F. H. Dailey, Secy.

WASHINGTON, D. C.—It is proposed to extend the arc light service outside the city limits. W. C. Allen, District Elec. Engr.

FREDERICSBURG, VA.—A. P. Rowe, Mayor, writes us that the city has voted to own the plant, to cost about $12,000, and to issue bonds for the same, but on account of some informality in the vote the matter has been postponed until December.

BLUEFIELD, W. VA.—It is stated that bids will be asked in a month for building a plant, to cost about $10,000. W. A. Cather may be addressed.

CHARLESTON, W. VA.—E. P. Roberts & Co., 275 Prospect St., Cleveland, O., are reported as preparing plans for a plant for the State House, to cost $4,000.

ROXBORO, N. C.—This place has voted to issue bonds for a plant, water works, etc.

TARBORO, N. C.—John A. Weddell, Cy. Clk., writes us that an election will be held April 17 to vote on the question of issuing $10,000 in bonds for a plant.

CAMDEN, S. C.—R. C. Johnson, Camden, has an unimproved water power site on the Wateree River which he wishes to sell.

ST. HELENA, S. C.—Bids are asked by the United States Engineer, Charleston, S. C., until May 13 for furnishing and installing plants at Fort Sumpter and St. Helena Island, S. C., as stated in our advertising columns.

KNOXVILLE, TENN.—Press reports state as follows: C. C. Howell, Mgr. of local interests of Hambleton & Co., Baltimore, purchasers of the Nashville electric light and power plant and the Nashville street railway, states that the syndicate has an option on another road in Nashville. In addition to this the Hambletons will build a gas plant in Nashville. Mr. Howell states that the company will spend about $5,000,000 in the purchase of the properties and improvements thereon. The transfer of the Nashville street railway will be effected April 20.

ELIZABETHTOWN, KY.—R. L. Wintersmith, Mayor, writes us that a franchise for a plant has been granted to R. G. Phillips, Elizabethtown.

BEREA, O.—This place voted April 3 in favor of issuing $12,000 in 6% bonds for a plant.

CIRCLEVILLE, O.—Heffner & Co. inform us that the Circleville Electric Light & Power Co. has secured a new contract, but it has been enjoined. Heffner & Co. have applied for a franchise.

COLUMBUS, O.—The county commissioners will probably soon take definite steps towards the construction of a plant for the county infirmary.

DEFIANCE, O.—J. A. Deindoerfer, Mayor, writes us that this place voted April 3 to issue $25,000 in bonds for a plant. The council will probably take action at once to let contracts.

SIDNEY, O.—P. F. Sarver, Pres. Council, writes us that this place has voted against building a plant.

VINCENNES, IND.—Bids are asked until May 22 for lighting the streets for 10 years with 175 gas or 165 arc lights. The privilege for private lighting for 15 years is included. Bryan & Humphrey, Engrs., Turner Bldg., St. Louis, Mo.; Chas. Laugel, Cy. Clk.

BLISSVILLE, MICH.—The council has been asked to grant a 15-year franchise for a plant.

CROSSWELL, MICH.—The question of purchasing the plant will soon be voted upon.

GREENVILLE, MICH.—The question of awarding a new contract to the Greenville Electric Light Co. or of using gas is being considered.

HOMER, MICH.—The council has been asked to grant a franchise for a plant.

MONROE, MICH.—This place voted April 4 to issue $20,000 in bonds for a municipal plant. E. C. Rauch, Mayor.

OTISCO, MICH.—The Citizens' Light Co., it is stated, has been granted a franchise.

SCHOOLCRAFT, MICH.—Henry S. Allen, Chn. Com., writes us that the council is anxious to grant a franchise for a plant, with the privilege of the city purchasing it later.

STEVENS POINT, MICH.—The Jackson Milling Co. will spend $125,000 here this summer in building a 13-ft. concrete masonry dam across the Wisconsin River and an electric power house, according to reports.

GALESBURG, ILL.—Local papers state that the Galesburg Electric Motor & Power Co. will build a plant to light this city, competing for the city lighting contract with the Galesburg Electric Light & Gas Co.

CHIPPEWA FALLS, WIS.—C. H. Stanley, it is stated, proposes to build a water power plant.

GARNER, IA.—The Garner Electric Light, Power & Telephone Co. has been granted a franchise.

IOWA CITY, IA.—The Iowa City Electric Light Co. is preparing to erect a new plant on the site of the one recently destroyed by fire. It is hoped to have it completed by June 1, and the building will cost about $30,000.

STILLWATER, MINN.—Christian Burkhardt has submitted a proposition to the council to light the town from a plant to be built at the falls of Willow River. Mr. Burkhardt will also offer to furnish power to the Lowry & Goodrich St. Ry. to be built here.

FORT BENTON, MONT.—It is stated that Eastern parties have applied for a franchise for a plant.

LEE SUMMIT, MO.—A. C. Miller, Cy. Clk., writes us that nothing has yet been done by the new board towards building a plant.

FULTON, MO.—This place has voted to spend $4,000 for enlarging the plant. Bryan & Humphrey, Consult. Engrs., Turner Bldg., St. Louis.

WINNEMUCCA, NEV.—Charles Haws, Tuscarora, Nev., proposes to build a plant in this place, to cost about $10,000, as soon as subscriptions for 400 lights are secured.

SEATTLE, WASH.—C. H. Baker, Pres. Snoqualmie Falls Power Co., writes us that it is not known when bids will be asked for constructing the proposed underground subway for the wires; estimated cost, $20,000.

COQUILLE, ORE.—Stewart Lyons is making arrangements for the erection of a plant for municipal and domestic purposes in this city, according to reports.

PRINEVILLE, ORE.—Bids are asked until June 1 for erecting a plant of 600 16-c. p. incandescent light capacity, to cost $25,000. Address H. V. Gates, Elgin, Ore.

REDWOOD CITY, CAL.—An election will be held May 20 to vote on the question of issuing $4,185 in bonds for a plant.

SAN FRANCISCO, CAL.—Bids are asked until April 17 for furnishing and installing gas and electric light fixtures, etc., in the Hall of Justice and Morgue buildings. Shea & Shea, Archs., 26 Montgomery St.; J. A. Russell, Clk. Bd. Supervisors.

SANTA ANA, CAL.—Bids are asked until May 1 for the purchase of a franchise for furnishing light and power. Edward Tedford, Cy. Clk.

SANTA MONICA, CAL.—The Santa Monica Electric & Power Co. announces that it is about to install a new electric and gas plant to cost about $50,000. A new power house is to be erected on the beach. Plant will include a 500-HP. steam engine, one electric generator of 500 K-W. capacity, and two other generators, each having a capacity of 60 K-W.

BARRE, ONT.—The council will spend about $10,000 in improving the plant, recently purchased.

GALT, ONT.—Bids are asked until May 10 for installing and operating a plant. J. H. Scott, Chn. Com.

NIAGARA FALLS, ONT.—It is stated that the Canadian Power Co. will soon begin the construction of its proposed plant. Jas. A. Roberts and Edward Michael, Buffalo, N. Y., and Wm. B. Rankine, Engr. and Secy. Niagara Falls (N. Y.) Power Co., may be addressed.

RAT PORTAGE, ONT.—C. W. Belyea writes us that the town is considering an offer to purchase half interest in the property of the Citizens' Illuminating & Electric Co.

VICTORIA, B. C.—The owners of the Wellington Extension Mine at Oyster Bay have let a contract to Geo. C. Hinton & Co. for the placing of a complete tramway and electric light plant, to cost about $60,000. It is expected that the plant will be in operation by the middle of summer.

WINNIPEG, MAN.—This city voted April 6 by a majority of 136 in favor of building a municipal plant to cost $60,000.

NEW COMPANIES.—Sewaren Co., Sewaren, N. J.; $125,000; to build and operate an electric plant, etc.; Robt. W. DeForest, John L. Conover, Geo. Holmes.

Indiana Heat & Light Co., Mishawaka and South Bend, Ind.; $5,000,000; Geo. T. E. Lym, R. F. Atkins.

Fishers Island Electric Light, Heat & Power Co., New Jersey Corporation Guarantee & Trust Co.'s Bldg., Camden, N. J.; $10,000; E. M. Ferguson, Robt. Linderman.

Norfolk Light & Power Co., Norfolk, Va.; $25,000; Wm. Rosborough, W. H. Miner, A. E. Krise.

Hannawan Falls Water Power Co., Potsdam, N. Y.; $300,000; to develop power for manufacturing, chemical anl electrical purposes through the construction of dams on the Raquette River; Wm. B. Cogswell, Syracuse; Ogden H. Toppen, Potsdam. Wallace C. Johnson, Engr., Niagara Falls, N. Y., writes us that most of the work will be done by the day. The wheels will be furnished by S. Morgan Smith, York, Pa., and the machinery by the General Electric Co.

National Electric Co., Detroit, Mich; $50,000, all paid in; F. Luce, Jr., J. F. Nichols, Detroit; L. T. Bennett, Port Huron, Mich.

Milwaukee Electric Co., Milwaukee, Wis.; $40,000; Pres, W. P. Harper; Vice-Pres., Walter Cary; Treas., John A. Whaling; Secy. and Engr., Harry W. Morris.

Gate City Electric Supply & Construction Co., Atlanta, Ga.; W. H. Turner, Pres.; J. D. Turner, Vice-Pres.; Dr. J. P. Kennedy, Sec.; Oscar C. Turner, Treas., and Gen. Mgr.; D. A. Jett, Supt., to succeed the Gate City Electric Supply & Construction Co., 74 N. Broad St.

People's Light & Power Co., Enfield, Conn.; Wm. C. Case.

South Bethlehem Electric Light Co., South Bethlehem, Pa.; Chas. P. Hoffman, Wm. H. Lauer, Oliver O. Trone.

International Construction & Power Co., Boston, Mass.; $500,000; J. F. Shaw, P. W. Sprague, N. Sumner Myrick.

Lackawanna Valley Electric Light, Heat & Power Co., Carbondale, Pa.; $200,000; I. L. Newell, Kingston, Pa.; J. B. Russell, Wilkesbarre, Pa.; Grant Pelton, Scranton.

Peoples' Electric Light, Heat & Power Co., Lyons, N. Y.; Ledyard S. Cuyler, Wm. H. Egan.

Louisiana Chemical Light, Heat & Power Co., Pierre, S. Dak.; $1,000,000; Eugene C. Robinson, Albert E. Mellen; also the Rhode Island Chemical Light, Heat & Power Co.; $1,000,000; the Florida Chemical Light, Heat & Power Co.; $1,000,000; the Georgia Chemical Light, Heat & Power Co.; $2,000,000; the Kansas Chemical Light, Heat & Power Co.; $2,000,000; the Missouri Chemical Light, Heat & Power Co.; $5,000,000.

Consumers' Electric Co., Wheeling, W. Va.; $500,000; John E. Wright, W. C. Hanlan, Geo. E. House.

Philmont & Claverack Electric Light & Power Co., Philmont, N. Y.; $10,000; Harry Bates, Rensselaer; B. H. Dennison, Berlin.

Clifton Forge Light & Water Co., Clifton Forge, Va.; stock of $100,000; J. C. Carpenter, A. J. Duncan. Both plants are in operation.

Iowa Light, Heat & Power Co., Boston, Mass.; $50,000; A. L. Daniels, Pres.; Geo. W. Toms, Treas.

Brooklyn Gas & Electric Light Co., Brooklyn, N. Y.; $1,500,000, with $2,000 paid in; W. L. Tourney, Maurice Landauer, Frank N. Wirgman.

Sandusky Gas & Electric Co., Sandusky, O.; $500,000; Thos. B. Hoxsey, Clark Rude, Frank Warren.

Canton Illuminating Co., Canton, Pa.; $12,000; L. R. Gleason, H. L. Clark, W. V. Bacon, Canton.

Imperial Land, Power & Transportation Co., New York; to construct motors and to operate them with compressed air, petroleum, steam, gas or other power; $100,000; Myer Nussbaum, Albany; Wm. B. Fasig, E. M. Stalker.

Selin's Grove Electric Light, Heat & Power Co., Selin's Grove, Pa.; $5,000; A. W. Potter, Chas. P. Ulrich.

Consolidated Electric & Mfg. Co., Pittsburg, Pa.; $6,000; John Stadtfeld, Alex. Spire, L. S. Levin.

Bucks County Water & Water Power Co., Solebury, Pa.; $1,000; Ellen Boyer, Lebanon, Pa.; Thos. Earle, Steelton, Pa.

Wiley Electric Co., Portland, Me.; $500,000; Pres., George J. Bicknell, Boston, Mass.; Treas., Frank R. Wiley, Malden, Mass.

Independent Electric Light & Power Co., San Francisco, Cal.; $10,000,000; Claus Spreckels, John D. Spreckles, Adolph B. Spreckels, D. K. Gibson.

BRIDGES

ALBANY, N. Y.—Bids are asked until April 21 for constructing a lift bridge over the Erie Canal at Brighton; a lift bridge over the Canal at Utica; a steel plate-girder bridge of 89-ft. span, at Pittsford, and a steel plate-girder bridge of 60-ft. span at Sandy Hill, as stated in our advertising columns. John N. Partridge, Supt. Pub. Wks.—A contract for the new Maiden lane bridge has been awarded by the N. Y. C. & H. R. R. R. Co. to the Pencoyd Iron Works, Philadelphia, according to reports.

ASHTON, L.I.—A contract has been awarded to the Massillon Bridge Co., Massillon, O., at $2,000, for a plate-girder span for the town of Cumberland.

BAINBRIDGE, N. Y.—At the election April 4 it was voted to appropriate $15,000 for a bridge over the Susquehanna River, according to reports. C. G. Norton, Highway Comr.

BUFFALO, N. Y.—A contract has been awarded to the Elmira Bridge Co., at $194,434, for the superstructure of a viaduct in Elk St. and Abbott Road.

HOFFMANS, N.Y.—Reports state that the Elmira Bridge Co., Elmira, N. Y., has been awarded a contract for a bridge over the Mohawk River, on the N. Y. C. & H. R. R. R.

LOCKPORT, N. Y.—A bill appropriating $16,000 for a bridge over the canal at Chapel St. has passed the assembly.

OTTO, N. Y.—The towns of Persia and Otto have joined to construct an iron bridge over Cattaraugus Creek.

SENECA FALLS, N. Y.—The governor has signed a bill appropriating $8,000 for a bridge over the canal at Rumsey St.

WATERTOWN, N. Y.—The board of public works has passed a resolution to construct a new bridge over the Black River at Pearl St., to cost about $5,000.

NEWCASTLE, PA.—The Pittsburg & Lake Erie R. R. Co. has awarded a contract to Patton & Gibson, 531 Wood St., Pittsburg, for the substructure work of its new bridge over the Chenango River at Newcastle. Work is to commence at once.

PHILADELPHIA, PA.—Burnham, Williams & Co. has been authorized to construct an iron bridge about 20 ft. wide over Hamilton St.

ODESSA, DEL.—The Pennsylvania R. R. Co. will construct a bridge over the canal, according to reports.

BIRMINGHAM, O.—Bids will soon be asked by the county commissioners, at Sandusky, for constructing a bridge 470 ft. long, to cost about $16,000.

COLUMBUS, O.—A proposition to construct a bridge over the tracks on Dresher Ave. is being considered by the Cleveland, Cincinnati, Chicago & St. Louis Ry. Co. and the county commissioners.——The county commissioners have awarded contracts as follows: Winchester bridge over Big Walnut Creek, C. C. Swisher, approaches, $3,230; J. A. Swingle & Co., substructure, $9,384; New Columbus Bridge Co., superstructure, $9,349; Thos. Rowan, bridge over Early Run, $1,966; John Braun, Carruthers' bridge, $1,477.

MARIETTA, O.—E. Frank Gates, Cy. Engr., informs us that at the election April 3 the question of issuing $70,000 of bridge bonds was carried by a large majority. The council has not yet taken action for construction.

PORTSMOUTH, O.—C. S. Goddard, Acting Comr., of the canal, informs us that the Cincinnati, Portsmouth & Virginia Ry. Co. is contemplating the construction of a bridge over the canal. Samuel Hunt, Pres., Cincinnati.

NORWALK, O.—Reports state that it was voted April 3 to issue $11,000 of bridge bonds. F. W. Van Dusen, Mayor.

SIDNEY, O.—A contract was awarded to the Newcastle Bridge Co., April 4, at $1,745, for a Pratt truss bridge.

PORT HURON, MICH.—H. Kaumeier, Supt. Sts., informs us that the following bids were received April 3 for new floor beams, beam hangers and steel joists under the street car tracks in the Military St. swing bridge: King Bridge Co., $1,754; B. D. Bartow, $1,725; Wrought Iron Bridge Co., $1,710; Toledo Bridge Co., $1,499; A. L. Schofield, $1,385; J. J. Granville, $1,285.

CHICAGO, ILL.—Bids are asked by the clerk of the sanitary district, 1110 Security Bldg., until April 26 (postponement from April 10), for erecting the sub and superstructure of a railway bridge over the Chicago River near Taylor St., and also a bridge for Taylor St. over the same river, as stated in our advertising columns.

JOLIET, ILL.—Bids are asked by the board of sanitary district trustees, 1110 Security Bldg., Chicago, until May 31, for furnishing the material and for constructing a double track plate girder railway bridge of two spans of 78 ft. each, as stated in our advertising columns. Joseph F. Haas, Clk.

PRAIRIE CITY, IA.—Reports state that the Burlington, Cedar Rapids & Northern Ry. Co. will construct a deck girder bridge of 100-ft. span and two 40-ft. deck girder bridges. H. F. White, Ch. Engr., Cedar Rapids.

OMAHA, NEB.—County Surveyor McBride is preparing a report of the condition of the county bridges with a view to making the necessary repairs this season.

LEAVENWORTH, KAN.—It is reported that Leavenworth and Johnson counties will construct a steel and iron bridge over the Kansas River, opposite De Soto, Mo., to cost about $13,000.

STOCKTON, CAL.—The county surveyor has reported that it would cost $8,000 to convert the Bensons' Ferry bridge into a draw bridge.

WINNIPEG, MAN.—Bids are asked until April 15 for constructing six stone arch bridges and for widening of rock cutting for bridge 146, on the Canadian Pacific Ry. J. Woodman, Engr., Winnipeg.

BREAMORE, ENGLAND.—Bids are asked until May 1 for the substructure of a bridge over the River Avon, at Breamore. W. J. Taylor, County Surv.; H. Barber, Clk. of County Council, The Castle, Winchester.

BUILDINGS.

PORTLAND, ME.—The wholesale grocery store of Geo. C. Shaw & Co., on Congress St., was destroyed by fire April 7, causing a reported loss of $50,000.

RUTLAND, VT.—This city has voted to issue $20,000 in city hall bonds.

BOSTON, MASS.—The board of apportionment of Boston has voted a loan of $475,000 to be used in erecting seven new school buildings.

LOWELL, MASS.—Bids are asked until 12 m. April 13 for the erection of the Convent of the Immaculate Conception on Bartlett St. Davis & Raynes, Archs., 49 Hildreth Bldg., Lowell.

MILTON, MASS.—Bids are asked until April 21 for constructing an addition to the Tucker school building; deposit, $1,000. J. Frank Pope, Secy. Bldg. Com.; Bradford Hamilton, Arch., 178 Devonshire St., Boston.

TAUNTON, MASS.—Bids are asked until April 21 for erecting a fire and police station on Middleboro Ave. N. J. W. Fish, Chn. of Com.

PUTNAM, CONN.—Bids are asked until April 17 for a temporary home for the county of Windham. E. H. Hall, North Windham, may be addressed.

BROOKLYN, N. Y.—Joseph H. Bauland, 503 Fulton St., is said to contemplate the erection of a 5-story brick store and loft building at Fulton and Bridge Sts., to cost $75,000. Albert E. Parfitt, Arch., 26 Court St.

NEW YORK, N. Y.—Plans have been filed by William Sugarman, 114 East Broadway, for three 6-story brick flat and store buildings at 152 to 156 Monroe St., to cost $65,000. M. Bernstein, Arch., 145 Broadway; by Robt. E. Smith, for seven 4-story brick tenement buildings at Boston Road and Home St., to cost $60,000. Chas. E. Reid, Arch., 158 West 14th St.; by James Stanley, 238 East 119th St., for a 10-story brick store and loft building at University Place and 12th St., to cost $150,000. W. C. Hazlett, Arch., 1,133 Broadway; by Salvadore Lagrassa, 763 East 137th St., for a 7-story brick bachelor apartment and flat building at 117th St. and Manhattan Ave., to cost $90,000. Neville & Bagge, Archs., 217 West 125th St.; by Zimmerman & Valenti, for a 7-story brick flat and store building at 119th St. and Lenox Ave., to cost $110,000. G. F. Pelham, 503 5th Ave.; by Harry Fischel, 215 East Broadway, for three 6-story brick flat and store buildings at Grand and Suffolk Sts., to cost $85,000. Samuel Sass, Arch.; by Nathan E. Clarke, 128 East 83d St., for a 7-story brick flat building at 90th St. and Central Park West, to cost $100,000. G. F. Pelham, Arch.; by William Neckermann, Bathgate Ave. and 173d St., for seven 4-story brick flat buildings on Bathgate Ave., to cost $112,000. Charles Stegmayer, Arch., 306 East 82d St.; by Jacob M. Wimple, 1635 Madison Ave., for a 6-story brick flat building on St. Nicholas Ave., near 147th St., to cost $90,000. G. F. Pelham, Arch.; by E. L. Mueller, 557 East 153d St., for two 5-story brick flat buildings on Teasdale Place, near 3d Ave., to cost $50,000. Rudolph Werner, Arch., 7 Teasdale Place; by McCracken & Dagnell, 400 West 152d St., for a 7-story brick bachelor apartment and flat building at 94th St. and Madison Ave., to cost $180,000. Neville & Bagge, Archs.; by Paul B. Pugh & Co., 674 Columbus Ave., for a 7-story brick flat building on 11th St. near 6th Ave., to cost $90,000. G. A. Schillenger, Arch., 128 Broadway; by James Pyle, 436 Greenwich St., for a 10-story brick warehouse at Washington and Laight Sts., to cost, $60,000. T. R. Jackson, Arch.——Bids were received by the board of education April 6 for erecting a new building for Public School No. 181, at 65th St., near the Boulevard, as follows: Mapes-Reeves Construction Co., 150 Nassau St., $108,000; P. Gallagher, 150 5th Ave., $114,400; Thomas Cockerill & Son, 550 West 51st St., $119,500; Collier Weeks, $105,975; P. J. Brennan, 63 West 22d St., $114,200; L. A. Burke, 401 West 59th St., $112,995; Farrell & Hopper, 215 West 125th St., $115,629; Jas. J. Loonie, 287 4th Ave., $115,000; H. Probst, 1180 Broadway, $103,500.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until April 24, for erecting a new school building for Public School 183, 66th and 67th Sts., between 1st Ave. and Ave. A.——Plans have been filed by the Mohlman Estate, 120 Bowery, for a 6-story brick store and loft building at Jay and Greenwich Sts., to cost $100,000. C. W. Atkins, Arch., 18 Broadway; by F. W. Woolworth, Savoy Hotel, for a 5-story brick dwelling at 80th St. and 5th Ave., to cost $128,500. C. P. H. Gilbert, Arch.——C. A. Cowen, 1123 Broadway, is reported to have received the masonry contract for the 12-story business building to be erected for Henry Corn at 632 and 634 Broadway. Robert Maynicke, Arch.——G. A. Suter & Co. were the lowest bidders for the ventilating apparatus for the basement and sub-basement of the Post Office Building, at $9,875.——The following bids were received by the department of correction, 148 East 20th St., April 4, for erecting the steel cells in the new city prison: P. J. Carlin & Co., Brooklyn, $310,000; Van Dorn Iron Works Co., Cleveland, O., $330,000; Pauly Jail Building & Mfg. Co., St. Louis, Mo., $345,150; Champion Iron Co., Kenton, O., $354,875; Stewart Iron Works, Cincinnati, O., $387,250. Bids for installing a steam plant were as follows: Armstrong & Bolton Co., 62 Grand St., $93,325; Blake & Williams, 362 West Broadway, $102,764; Gillis & Geoghegan, 539 West Broadway, $106,800; Baker, Smith & Co., 81 West Houston St., $108,390 and $112,495; P. J. Carlin & Co., Brooklyn, $111,950; E. Rutzler, 178 Center St., $113,314; Frank Dobson, 218 East 42d St., $113,649; Walker & Chambers, 50 East 20th St., $118,800; James Curran Mfg. Co., 512 West 36th St., $119,800; New York Steam Fitting Co., 137 Elm St., $123,148; Wells & Newton Co., 235 Eldridge St., $128,340; Howe & Bassett, Rochester, N. Y., $129,000; W. N. Tobin, 532 Columbus Ave., $129,585; Francis Bros. & Jellett, 70 Trinity Place, $130,000. Bids for plumbing, drainage, etc., were as follows: M. J. O'Brien, 835 6th Ave., $58,300; Howe & Bassett, Rochester, N. Y., $64,000; Wells & Newton Co., $66,460; P. J. Carlin & Co., Brooklyn, $83,200; L. D. Hosford, 68 Beekman St., $84,858.

POUGHKEEPSIE, N. Y.—An election will be held in this city April 18, according to reports, to vote upon the expenditure of $59,300 for new school buildings.

SCHENECTADY, N. Y.—The council of this city has been asked to appropriate $75,000 for a new high school building.

SCHENECTADY, N. Y.—Bids are asked until May 1 for erecting a 2-story brick veneer addition to the public school building on 1st Ave., Mount Pleasant. Ed. L. Davis, Arch., Veeder Bldg.

WARRENSBURG, N. Y.—School district No. 1 has voted to erect a new stone school building, to cost about $20,000.

NEWARK, N. J.—Plans are said to have been prepared for a new 10-story office building to be erected at Bank and Halsey Sts., to cost about $125,000. Hurd & Sutton, Archs., Newark.——It is announced that the Newark Athletic Club will erect a new $40,000 gymnasium building in the rear of the new main building at 40 Park Place. Wm. P. Field, Arch., Newark.

PASSAIC, N. J.—Bids are asked by the board of education until April 27 for the construction of a school building on Summer St. near Myrtle Ave. Wm. M. Meekin, Arch., Daily News Bldg.

PERTH AMBOY, N. J.—The board of education has decided to ask for plans for a new high school building, to cost about $26,000.

TRENTON, N. J.—Joseph Trier, 62 Pennington Ave., Trenton, has been awarded the contract for the carpentry and milling work, etc., on the new Broad St. Bank building, to be erected at State and Montgomery Sts., at $18,706. Remington, Sherman & Co., Philadelphia, Pa., received the contract for building the vault at $7,200.

CAMDEN, N. J.—We are informed that George Bachmann, Camden, has been awarded the contract for erecting a bank building for the Central Trust Co., and that he is on the market for supplies. Bids will soon be asked by the architect, Thomas Stephens, Camden, on heating, mahogany partitions and furniture, and safe deposit vaults, for the same building; total cost, $45,000.

EDGEWOOD, PA.—Bids are asked until April 20 for the construction of an addition to the school building in this borough. F. S. Craighead, Secy.; E. J. Carlisle & Co., Archs., 700 Lewis Block, Pittsburg, Pa.

McKEESPORT, PA.—Andrew Carnegie has offered $50,000 for a public library building in this city, provided the citizens will furnish the site.

PHILADELPHIA, PA.—Charles O'Neill, 1216 South Broad St., is stated to have been awarded the contract for erecting a 9-division public school building at Girard Ave. and Leopard St., at $26,883.

WILKESBARRE, PA.—The plans of F. J. Osterling, 416 7th Ave., Pittsburg, Pa., were selected April 6 for the new court house to be built in this city for Luzerne county, to cost about $450,000. Those presenting the next best plans, each of which received a prize of $300, were: A. H. Kipp, Wilkesbarre; Hazelhurst & Heckel, Philadelphia; Davey & Williams, Wilkesbarre; McCormick & French, Wilkesbarre, and J. H. W. Hawkins, Wilkesbarre.

BALTIMORE, MD.—The Continental Construction Co. was incorporated April 4, with $325,000 capital stock, by Alexander Brown, John K. Cowan and others. The company proposes to erect the new office building of the Continental Trust Co., at Baltimore and Calvert Sts.

RICHMOND, VA.—Reports state that negotiations were completed April 18 whereby the Chesapeake & Ohio and the Southern Air Line systems are to unite in constructing terminals and erecting a station and office building for their joint uses, to cost about $3,000,000.

STARKVILLE, MISS.—F. L. Weir, Mayor, writes us that this town will issue $12,500 in 20-year 6% bonds, non-taxable for ten years, for the erection of a new school building. Jas. W. Norment, Town Clk.

ATLANTA, GA.—Plans have been prepared by H. T. McDaniel, Cincinnati, O., according to reports, for a new union passenger station, to be built in Atlanta for the Louisville & Nashville Ry. and the Southern Ry.; estimated cost, $250,000.

CARTHAGE, O.—Bids are asked until April 29 for masonry work, etc., for a 2-story brick building for Longview Hospital at Carthage. John Zumstein, Pres.; Gustave W. Drach, Arch., 519 Main St., Cincinnati, O.

CLEVELAND, O.—John Gill & Sons, Cleveland, have secured the contract for erecting the new Williamson building, at Euclid Ave. and Public Square, to cost about $800,000. The Van Dorn Iron Works Co., Cleveland, will furnish the structural steel.

DAYTON, O.—Bide are asked until April 24 for erecting a 16-room brick school building at Dayton; also for an 8-room addition to the building on North Broadway. G. C. Kennedy, Pres. Bd. of Education; Charles Herby, Arch., 27 Beckel Bldg.

WARREN, O.—This city has voted to issue $30,000 in bonds for a new school building. W. C. Ward, Mayor.

DETROIT, MICH.—Bids are asked by the supervising architect, Washington, D. C., until April 27, for alterations and repairs to the U. S. building in this city.

CHICAGO, ILL.—Plans are being prepared for remodeling a 4-story store and hotel building at 184 Randolph St. for the Bismarck Hotel Co.; estimated cost, $40,000. Huehl & Schmid, Metropolitan Block——Plans are also being prepared, according to reports, for two 3-story apartment buildings for William McGuire. Arthur Foster, Arch., 4310 Cottage Grove Ave.——Plans have been filed by the Chicago Telephone Co. for a 7-story brick apartment building at 210 and 212 Washington St., to cost $100,000.

EVANSTON, ILL.—A local contractor has received the contract for erecting the new $25,000 gymnasium building, 100 × 80 ft., for the Y. M. C. A. Work is to be completed by Sept. 1.

SYCAMORE, ILL.—Bids are asked until April 20 for erecting a new church building for the First Baptist Church of Sycamore. L. L. Cloyd, Chn. Bldg. Com.; Turnbull & Jones, Archs., Elgin, Ill.

ALGONA, IA.—Bids will be received about April 20, according to reports, for erecting a 3-story brick hotel building, to cost about $20,000. C. E. Eastman & Co., Archs., Des Moines, Ia.

COUNCIL BLUFFS, IA.—Bids are asked until May 1 for the purchase of $67,000 of 4% school building bonds, voted March 13. Geo. S. Davis, Treas. of school district.

IOWA CITY, IA.—Rush, Bowman & Rush, Grand Rapids, Mich., were awarded the contract April 2 for the erection of an $80,000 court house for Johnson county. The Cincinnati Steel & Iron Works, Cincinnati, O., also received the contract for erecting a $10,000 jail building.

MONTICELLO, IA.—Bids are asked until April 25 for the erection of a business and office building at Monticello. Nercott & Donnan, Archs., Independence, Ia.

LAKE CITY, MINN.—Bids are asked until May 1 for erecting a new city hall building. J. D. Barton, Cy. Recorder.

ST. PAUL, MINN.—Bids are asked by the supervising architect, Washington, D. C., until May 1 for the interior finish, plumbing and gas-piping at the U. S. Building in this city.

SPRINGFIELD, MINN.—Bids are asked until April 22 for erecting a parochial school building for St. Raphael's Church, of Springfield; bond, $7,000. Augustine Wirth, Pastor; address, Charles Gamble, Secy.

WEST SUPERIOR, WIS.—Schmidt Bros., West Superior, have received the contract for building the foundation of the new steel grain elevator, to be erected here for the Great Northern Ry., at $85,000. The elevator is to have a capacity of 6,500,000, and is estimated to cost over $2,000,000.

ST. LOUIS, MO.—Bids are asked until April 25 for building the storage coal shed, lavatory and supply house at high service pumping station No. 3, at Baden. R. E. McMath, Pres. Bd. of Pub. Impvts.

SHOSHONE AGENCY, WYO.—Bids are asked by the office of Indian Affairs, Washington, D. C., until May 2 for erecting a stone work shop building at Shoshone Agency.

DENVER, COLO.—L. H. Wood has been granted a permit to erect an apartment building at 924 Broadway, to cost $70,000.

DALLAS, ORE.—Erb & Van Patton, Salem, Ore., have received the contract for erecting the new Polk county court house, at $24,932, using stone.

STOCKTON, CAL.—The contract for the construction of St. Joseph's Home has been let to D. F. Burns, of this city, at $18,953, exclusive of the heating plans and foundation.

CARSON, NEV.—Bids are asked by the office of Indian Affairs, Washington, D. C., until May 4 for erecting a brick shop building at the Carson Indian School. Jas. K. Allen, Supt., Carson.

PIMA, ARIZ.—Bids are asked by the office of Indian Affairs, Washington, D. C., until May 8 for erecting one brick school building and water and sewer systems at the Pima Agency. Elwood Hadley, U. S. Indian Agt., Pima.

HARROGATE, ENGLAND.—Competitive designs are asked by this city until June 3 for a new kursaal, etc., in connection with the Spa Concert Room, to cost about £20,000 ($100,000). Premiums of £150, £100 and £75 are offered. Samuel Stead, Borough Surveyor.

STOCKTON-ON-TEES, ENGLAND.—Plans are asked by the city until May 1 for a market hall. Premiums, £25, £15 and £10. Address the borough engineer.

WATER-WORKS.

WATERVILLE, ME.—This place voted April 1 to incorporate the Kennebec Water District. It is proposed to secure a new water supply, the present supply being furnished from the Messalonskee River by the Maine Water Co. Address Mayor W. C. Philbrook, City Clerk F. E. Brown or H. D. Eaton.

PLYMOUTH, N. H.—The Plymouth Aqueduct & Water Co.'s works will be transferred to the city about May 1, the city to pay the company $35,000.

BOSTON, MASS.—The following bids were received March 30 by the Metropolitan Water Board for constructing water pipe boxes and siphon on the Saugus River: William H. Ryan & Co., East Boston, Mass. (accepted), $4,584; Ross & Fowler, Boston, Mass., $4,890; William L. Miller, Boston, Mass., $5,695; J. N. Hayes & Co., Boston, Mass., $6,300; John Cavanagh, South Boston, Mass, $6,400.

SPENCER, MASS.—This town has voted $7,000 for a new stand-pipe for the works. N. E. Craig, Engr.

BRISTOL, CONN.—The Bristol Water Co. has been asked to extend its mains to Forestville.

FAIRFIELD, CONN.—E. W. S. Pickett writes us that a charter has not yet been granted to the Unquowa Water & Light Co., and as yet no plans have been prepared.

ELLENVILLE, N. Y.—This place has been granted authority to extend its works.

BROOKLYN, N. Y.—The Board of Public Improvements has authorized the spending of $100,000 for a new pumping station at Millburn. The station will have a capacity for 15,000,000 a day. New water pipe will be laid in Wards 1 and 3, Queens, at a cost of $65,000.

HOPEVILLE JUNCTION, N. Y.—The Southern Dutchess Water Co. has been incorporated with a capital stock of $5,000 by Storm Evans, East Fishkill, N. Y., and E. H. Travis, Poughkeepsie, N. Y.

LOCKPORT, N. Y.—C. H. Cornes, Cy. Engr., writes us that the contract for laying 1,960 ft. of 6-in. water pipe and 1,960 ft. of 15 to 10-in. pipe sewers have been let to C. M. Stainthorpe & Co., Lockport, at $2,433. The only other bid was submitted by F. J. Le Valley at $2,440.

NEW YORK, N. Y.—Bids are asked until April 20 for repairing the aqueduct, Bronx Borough, and for furnishing cast iron water pipe, special castings, stop cocks, hydrants, boxes, etc. William Dalton, Comr. Water Supply, 150 Nassau St., Manhattan Borough.

NYACK, N. Y.—G. N. Houston, Supt. and Engr., writes us that at a meeting of the taxpayers April 6 it was decided to complete the filter beds and reservoir and to construct a new reservoir and lay water pipe in Upper and South Nyack. An election to vote on the question will soon be held.

SENECA FALLS, N. Y.—The question of securing a better water supply is being considered.

TROY, N. Y.—Bids have been asked by the clerk of the Water Commissioners for furnishing about 6,200 ft. of 4 to 12-in. water pipe.

UTICA, N. Y.—The assembly has passed the bill authorizing this city to construct works.

WHITE PLAINS, N. Y.—Supreme Court Justice Keogh has appointed Maurice Dillon, of Port Chester; Clarence S. McClellan, of Mount Vernon, and Joseph B. See, of North Castle, commissioners of appraisal in the matter of taking land in White Plains and North Castle for the purposes of enlarging the White Plains Water Works and building a storage reservoir.

PLAINFIELD, N. J.—The Plainfield Water Supply Co. has decided to build a new stand pipe.

BRADDOCK, PA.—The Pennsylvania Water Co. has offered to furnish this city with a water supply from the Allegheny River. The city recently built a reservoir at a cost of $80,000. William Howat, Supt. Pub. Wks.

COOPERSBURG, PA.—C. F. Newcomer, Burgess, writes us that the matter rests with council to call an election to vote on the question of building works at a cost of $20,000.

ETHEL LANDING, PA.—The Crescent Water Co. has been incorporated with a capital stock of $1,000 by E. Langhner, Charles E. Brunner, of Ethel Landing, and W. A. McConnell, Beaver, Pa.

GLEN CAMPBELL, PA.—It is stated that this place has refused to grant a franchise, but will build municipal works.

MUNCY, PA.—The contract for building a 2,000,000-gallon reservoir and intake on Glade Run and laying two miles of 8 and 10-in. pipe at Muncy was awarded on April 5 to Fred P. Spalding, Bethlehem, Pa. It is expected that the improvements will be completed by the middle of July.

PHILADELPHIA, PA.—Councilman Seeds has introduced a resolution authorizing an appropriation of $600,000 for a new pumping station and the removal of Lardner's Point station on the Delaware River. C. F. Warwick, mayor, has approved ordinances authorizing the laying of water mains in a large number of streets.

PHŒNIXVILLE, PA.—Moritz G. Lippert, Pres. Bd. of Health, writes us as follows regarding the proposed improvements to the works: With the exception of the lowering of the intake pipe to the level of the river bed and the building of a flood wall around the river front and the two sides of the pumping station for protection against flooding from extreme high water, the proposed improvements relate only to water purification. Things have, however, not developed as yet to a final decision. There are two factions in town, one favoring the building of a 6,000,000-gallon sedimentation basin, to serve also the purpose of increased storage; the other favoring the construction of an additional reservoir of 2,250,000 gallons capacity (the same size as the present one), one of the two to be used as a subsiding reservoir, and the installation of a mechanical gravity filter plant of 2,000,000 gallons capacity per 24 hours, to be located between the two basins, the water to run from the subsiding reservoir by gravity to the filters, thence into a suction well, whence it will be lifted by a centrifugal low-lift pump operated by a gasoline engine, into the other or clear water basin, to pass thence into the distribution. The latter party has been making a vigorous fight lately, and the town council originally in favor of the former plan, has decided to hold an election and let the voters decide the question.

READING, PA.—The water board has decided to construct a sedimentation basin for the improvement to the Antietam Lake supply. E. L. Nuebling, Supt.

ROCHESTER, PA.—The Provident Water Co. has been incorporated with a capital stock of $25,000, of which $2,500 is paid in; incorporators, J. P. Leaf, Engr.; H. M. Camp, J. H. Meller.

LAUREL, DEL.—C. S. York, 1526 East Biddle St., Baltimore, Md., is reported as preparing plans for the works and a sewerage system; estimated cost of works, $7,000. E. B. Riggin and C. G. Otwell are on the committee.

BALTIMORE, MD.—Bids are asked until April 19 for furnishing a pipe-tapping machine, tapping gates, fittings, etc. The machine must be suitable for makings of pipes while under pressure, from 24 to 48 ins. in size, inclusive, and be fitted with 24-in., 30-in. and 36-in. cutters and extension braces, and the fittings are to be adapted for use with mains from 3 to 48 in. in diameter, inclusive. Wm. L. Kenly, Ch. Engr. Water Bd.——The Chesapeake Electric & Water Co., which furnishes water to Highlandtown and Canton, has purchased the Herring Run race track, comprising 75 acres, for the construction of a reservoir. The reseivoir will be used to hold the company's water from Herring Run.

CENTREVILLE, MD.—The town commissioners have awarded to Thos. C. Basshor & Co., Baltimore, the contract for erecting a Knowles pump and boiler for use at the water-works at $1,750. The pump will have a capacity of 450 gallons a minute, and the engine will be of 60 HP. The connection with the artesian well will be made about May 1.

FREDERICK, MD.—The aldermen have decided to start work immediately upon works for increasing the water supply from Fishing Creek, and have engaged John Pownale, 150 Nassau St., New York, to superintend the work. Jonathan Biser, Chn. Com., is prepared to receive bids for furnishing 30,000 lbs. of lead, etc. Bids for pipe will be asked in a few days. Estimated cost, $35,000.

CLIFTON FORGE, VA.—The Clifton Forge, Light & Water Co. has been incorporated with a capital of $100,000 by J. C. Carpenter, E. A. Stead, Clifton Forge; S. M. Hamill, Schenectady, N. Y., and Geo. H. Ingalls, Cincinnati, O. This is a reorganization of the Clifton Forge Water Co., which built works in 1889.

WHEELING, W. VA.—The question of putting in a water filter, it is stated, will soon be considered by the board. H. F. Jones, Pres.; C. M. Oliver, Supt.

ROXBORO, N. C.—This place is reported to have voted to issue bonds for works, electric plant, etc.

TARBORO, N. C.—J. A. Weddell, Cy. Clk., writes us that an election will be held April 17 to vote on the question of issuing $40,000 in bonds for works and a sewerage system.

BAINBRIDGE, GA.—This place, it is stated, proposes to issue $40,000 in bonds for works.

ROME, GA.—Press reports state that the committee investigating the question of purifying the water supply, composed of J. W. Rounsaville, B. T. Haynes, A. B. McArver, J. D. Moore, W. J. Griffin, I. F. Davis, D. B. Hamilton, E. L. Bosworth and W. M. Towers, has decided to construct a basin with sand bottom near the present basin, covering about one acre of ground. It is thought by this filtration the water can be made clear. It is estimated the cost will be $25,000. The new basin will have a capacity of 4,000,000 gallons.

EVERGREEN, ALA.—C. S. Rabb, Mayor, writes us that this place has not yet decided to put in works.

COLLEGE HILL, O.—Bids are asked until May 1 for the purchase of $100,000 of bonds authorized by the council March 11 for constructing the proposed works. Bids for building the works have also been asked. J. E. Bruce, Mayor.

GALLIPOLIS, O.—It is stated that the trustees of the Gallipolis Epileptic Hospital propose to build works for the buildings.

LEIPSIC, O.—C. W. Franklin, Chn. Com., writes us that the town intends to build works to consist of a standpipe about 15×120 ft.; six miles of 4 to 10-in. pipe; pump water from deep wells into a tank pump, about 50 hydrants, etc. The pumps will be operated from the boilers of the electric light plant. Nothing will be done until the new council meets about April 17. Estimated cost, $24,000.

BROWNSTOWN, IND.—The Brownstown Water & Light Co. has been incorporated with a capital stock of $8,000 by Frank B. Sherman. The contract for building the works has been let to the Phœnix Construction Co., Chicago, as stated in our issue of March 30.

LA PORTE, IND.—The council has rejected the bids for furnishing and laying 27,000 ft. of 16, 18 and 20-in. steel riveted and cast-iron water pipe. New bids will be asked for the pipe and for constructing the pumping station, etc. Estimated cost, $70,000. Further information may be found in our issues of March 9 and 16, and under Contract Prices in this issue. Chas. F. Leffman, Chn.Com.

PETERSBURG, IND.—The question of building works at a cost of $6,000 is being considered.

SOUTH BEND, IND.—The water board has voted to purchase an 8,000,000-gallon pump from the Edward P. Allis Co., Milwaukee, for about $35,000.

VALPARAISO, IND.—Press reports state that D. F. L. Skinner, of Valparaiso, has offered the city $10,000 for a franchise to build and operate works.

DURAND, MICH.—This place will probably vote in June on the question of issuing $3,000 in bonds for works. W. H. Putnam, Clk.

ISHPEMING, MICH.—Local papers are urging the council to take steps toward securing a better water supply at a cost of about $40,000.

CHICAGO, ILL.—Bids are asked until April 19 for laying water supply pipes in a number of streets. L. E. McGann, Pres. Bd. Local Improvements.

MURPHYSBORO, ILL.—Edward Flad, 118 Laclede Bldg., St. Louis, Mo., is preparing plans for a new standpipe for the Murphysboro Water-Works, Electric & Gas Light Co. to take the place of the one destroyed Jan. 31. Chas. L. Ritter, Supt.

PEARL CITY, ILL.—J. J. Freas, Village Clk., writes us that the town is in the market for six water meters.

GALESVILLE, WIS.—Benj. W. Deems writes us that the city expects to let the contract for building the works, to cost about $14,000. Geo. Hueston, Engr., Winona, Minn.

OCONOMOWOC, WIS.—F. W. Moldenhaun, Pres., writes us that on April 4 this city elected aldermen who are in favor of building works. The ordinance authorizing the construction will have to be passed. Estimated cost, $45,000.

PINE ISLAND, MINN.—This place, it is stated, will issue $6,000 in bonds for works.

PIERSON, IA.—It is stated that this place will build works to cost $3,000.

ROCKWELL, IA.—C. W. Harris, Mayor, writes us that the contract for building works will be let in from 30 to 60 days; estimated cost, $6,000. The water supply will be secured from wells. Jackson & Moss, Engrs., Des Moines.

UTE, IA.—O. E. Lathrop, Clk., writes us that the town will issue bonds and let the contract this summer for constructing works. The supply will be secured from wells. A tower and tank will be wanted. Population, 500.

BLOOMING PRAIRIE, MINN.—H. O. Anderson, Recdr., writes us that the village voted April 4 to issue $6,500 in bonds for works. The supply will be secured from wells. M. M. Guthrie, Pres. Bd.

LITTLE FALLS, MINN.—Press reports state as follows: In the action of Geo. W. Thayer against the city a continuance of the hearing to show cause why a receiver should not be appointed for the water works company at Little Falls has been filed with the clerk of the United States court, and the temporary restraining order that prevents the city from issuing $60,000 of bonds for the proposed city works has been continued.

MOUNTAIN LAKE, MINN.—The new village board is taking steps towards having works to cost $4,000.

GOTHENBURG, NEB.—We are informed that this place has voted in favor of the proposition to levy a tax of 8 mills for building works. The new board will take immediate steps towards its construction. The direct pressure system and a gas engine are proposed. The Gothenburg Water Power & Irrigation Co. wants a franchise, but the city prefers to build its own works. Geo. F. Anderson, Gothenburg, is preparing plans.

PITTSBURG, TEX.—It is stated that parties have offered to build works. An artesian well 2,000 ft. deep has been sunk.

SEALY, TEX.—The Sealy Water Supply Co. has been organized to build works. A. G. Preibisch, Pres.; A. Jordan, Secy.

CHINOOK, MONT.—Subscriptions are being secured for constructing works to cost $6,000. W. C. Kester and A. S. Lohman may be addressed.

LEADVILLE, COLO.—It is stated that a special session of the council was held April 6 to canvass the vote on the purchase of the water-works by the city at a cost of $200,000. The vote cast stood 236 for the purchase and 343 against it.

WENATCHEE, WASH.—The question of building works to cost about $4,500 is being considered.

LOS ANGELES, CAL.—Local papers state that the Los Angeles City Water Co. will build a cover to the reservoir, to cost about $15,000. Receiver Gibson may be addressed.

ORANGE, CAL.—Bids are asked until May 8 for the purchase of a franchise for putting in works. The Santiago Land & Water Co. has applied for a franchise. H. Z. Adams, Cy. Clk.

REDWOOD CITY, CAL.—An election will be held May 20 to vote on the question of issuing $8,000 in bonds for new mains.

CARSON CITY, NEV.—Bids are asked until April 15 for furnishing 2,000 ft. of 4-in. and 2,000 ft. of 3-in. water pipe. W. R. Davis, Clk.

SALT LAKE CITY, UTAH.—The Bear River Water Co. has been incorporated with a capital stock of $250,000 to furnish a water supply. David Evans, Pres.; Chas. L. Hoag, Secy.

STAYNER, ONT.—Bids are asked until May 1 for the purchase of $24,000 of 4% 30-year bonds for use in building the proposed works, bids for which were opened March 1. John Galt, Engr., Canada Life Bldg., Toronto; A. M McFaul, Mayor.

GRAVESEND, KENT, ENGLAND—Bids are asked until April 27 for manufacturing and furnishing the following for the extension to the works of the Gravesend & Milton Water Works Co.: One vertical triple-expansion, surface-condensing steam engine, having cylinders of 14, 20 and 33 ins. diameter, and a stroke of 3 ft.; two steel Lancashire steam boilers, 7 ft. diameter and 27 ft. long, fitted with Galloway cross tubes; one set of three throw deep well pumps, 13½ ins. diameter and 3 ft. stroke.; surface condenser, air and circulating pumps, steam pipes and valves, and all other accessories; also a high service pump attached to main engine. Wm. H. Troughton, Secy.; Jas. Mansergh, Engr.; 5 Victoria St., Westminster, London.

IRRIGATION.

WESTLAKE, LA.—Reports state that Dr. A. J. Perkins will construct an irrigation canal on his rice farm, near Chloe.

SUTHERLAND, NEB.—The Birdwood Table & Irrigation District will vote April 15 on the question of issuing $30,000 of bonds for the construction of a canal. Address A. L. McNeil, Sutherland.

LOS ANGELES, CAL.—Permission has been granted the Crystal Lake Irrigation & Power Co. to use odd sections in San Gabriel timber land reserve for a right of way for its pipe lines, etc., from the north fork of San Gabriel River to the Cienega, about 10 miles from Crystal Lake. This includes the right to build reservoirs, etc. The Lytle Creek Light & Power Co. has also obtained right of way for similar purposes over lands in San Gabriel and San Bernardino forest reserves.

SAN DIEGO, CAL.—The San Diego Water Co. has filed notices of appropriation of 15,000 ins. of water at various points in the Mission Valley. Another filing has been made by the Consolidated Water Co. for an appropriation of 5,000 ins. in the San Diego River at El Cajon.

PORTERSVILLE, CAL.—A meeting will be held April 29 to consider the plans of the committee for the consolidation of all the ditches on Tule River. It has been recommended to organize a new corporation under the name of the Upper Tule Water Co., with a capital stock of $4,000,000.

NEW COMPANIES.—Bear Canal Co., Evanston, Wyo.; $2,500; to irrigate Hilliard's flats; John Titmus, George Cook, Wm. Barker, of Evanston.

Palouse Ditch Co., Tacoma, Wash.; $20,000; general irrigation; Joshua Pierce, Robert P. Bradley, T. L. Stiles, of Tacoma.

Las Animas Ditch Co., Las Animas, Colo.; $19,000; Florida B. Moore, H. L. Lubers.

West Riverside Three Hundred & Fifty Inch Water Co., Riverside, Cal.; $35,000, with $500 subscribed; S. C. Evans, Jr., B. R. Smith and G. M. Carrigan.

Bear River Water Co., Salt Lake City, Utah; $250,000; to construct, improve and operate canals and water rights; David Evans, J. E. Dooly, Leah Evans, K. C. Belcher and Charles L. Hoag.

Stockton & Mokelumne Canal Co., Stockton, Cal.; $200,000; water for irrigating, mining and navigation; R. E. Welheit, Geo. E. Welheit, E. L. Welheit.

SEWERAGE.

BROCKTON, MASS.—The commissioners have asked for $15,000 to extend the sewers.

CONCORD, MASS.—Saml. W. Frescoln, Reading, Pa., and M. Ruso & Co., Boston, submitted the lowest bids April 10 for completing the system.

HYDE PARK, MASS.—Bids are asked until April 15 for constructing about 1¼ miles of pipe sewers. F. A. Wyman, Chn. Com.

WEBSTER, MASS.—The town has voted to construct an outfall sewer.

BRIDGEPORT, CONN.—Bids are asked until May 5 for constructing brick sewers, as described in our advertising columns. Bernard Keating, Clk. Bd. Pub. Wks.; G. C. Scofield, Cy. Engr.

NEW HAVEN, CONN.—The committee has recommended the construction of a sewage filtration plant to cost $5,000.

ALBANY, N. Y.—It is proposed to construct a sewer in Washington Ave. from Park Place to Knox St. at a cost of $14,000.

BUFFALO, N. Y.—John Harrer has submitted the lowest bid for building a sewer in Hopkins and Amber Sts. at $25,000.

COHOES, N. Y.—Bids are asked until April 26 for constructing 8¾ miles of sewers for section 3, etc., as stated in our advertising columns. Wm. J. Elliot, Cy. Clk.

MOUNT VERNON, N. Y.—Bids are asked until May 2 for constructing two receiving basins and connections. W. N. Hoyt, Cy. Clk.—The aldermen have sold $30,000 of 3½% sewer bonds to Allen, Sands & Co.

SARATOGA SPRINGS, N. Y.—Jno. E. Hodgman writes us that a bill is before the legislature appointing a commission of five and authorizing an issue of $75,000 in bonds for a system. Filtration beds will be adopted and a new trunk sewer line will be built.

WATERTOWN, N. Y.—The council is again considering the question of building a link sewer.

JERSEY CITY, N. J.—Bids are asked until April 18 for constructing 490 ft. of 24-in. brick sewer, driving 5,810 ft. of piles, etc., for a sewer in Ash St. G. T. Bouton, Clk. Bd. Water Comrs.

HARRISBURG, PA.—Bids are asked by the city clerk until April 15 for constructing a 12-in. pipe sewer in 4th St.; bond, $1,000.

PHILADELPHIA, PA.—An ordinance has been passed authorizing the construction of sewers in a number of streets.

SEWICKLEY, PA.—Bids are asked until April 17 for constructing 2,250 ft. of 24 and 6-in. pipe sewers, 100 ft. of 24-in. cast-iron pipe sewers, manholes, inlets, etc., in Walnut St. H. F. Hirst, Borough Engr. and Supt. Highways.

TURTLE CREEK, PA.—The council has voted to issue $45,000 in bonds for sewers and paving. Burgess Teats may be addressed.

LAUREL, DEL.—It is stated that C. S. York, 1526 East Biddle St., Baltimore, is preparing plans for a system and water-works.

BALTIMORE, MD.—It is proposed to build a 3-ft brick and 24-in. pipe sewer in Lee St. at a cost of $10,000 and a sewer in Wayne St. at a cost of $3,000.

WINCHESTER, VA.—The council is considering an ordinance appropriating $15,000 for a system.

PLEASANT VALLEY, W. VA.—It is proposed to build a system to cost $7,000 jointly with Echo Point and Edgington's Lane. Samuel Hazlett, Robt. Anderson and Jas. K. Hall are on the committee.

TARBORO, N. C.—Jno. A. Weddell, Cy. Clk., writes us that an election will be held April 17 to vote on the question of issuing $40,000 in bonds for a system and water-works.

ATLANTA, GA.—The council will vote April 17 on the question of building 20 to 8-in. pipe sewers in seven streets. W. D. Greene, Cy. Clk.

WAYCROSS, GA.—R. P. Burt, Clk. Council, writes us that this place voted April 1 against issuing $50,000 of 5% 30-year bonds for a system. The question will be voted upon again Dec. 2.

LEXINGTON, KY.—The question of issuing $50,000 in bonds for new main sewers is being considered.

CAMBRIDGE, O.—Bids will be asked about April 20 for constructing sewers, for which $17,000 in bonds were voted April 3. O. M. Hoge, Cy. Engr.

DAYTON, O.—Bids are asked until April 20 for constructing sewers in a number of streets. J. L. Baker, Pres. Bd. Cy. Affairs.

EAST LIVERPOOL, O.—F. H. Croxall, Secy., writes us that the advertisement calling for bids until April 4 for constructing seven miles of pipe sewers was withdrawn. A new advertisement will be ordered.

TOLEDO, O.—Bids are asked until April 17 for constructing a 24-in. cylindrical brick sewer. W. O. Holst, Cy. Clerk.

LOGANSPORT, IND.—Bids are asked until May 1 for the materials and for constructing about 22,500 ft. of 24 to 8-in. pipe and 7,373 ft. of brick sewers, oval in shape, and varying in size from 1 ft. 4 ins. × 2 ft. to that of 2 ft. 6 ins. × 3 ft. 9 ins. A. D. Fansler, Cy. Clk.

INDIANAPOLIS, IND.—It is proposed to construct main sewers in Hillside Ave. and East Michigan St. to cost about $85,000 and an intercepting sewer for the district north of Fall Creek.

WARSAW, IND.—W. Y. Chamberlain, Cy. Engr., writes us that Frank T. Oakley, Toledo, O., has been engaged to prepare plans for a system to cost about $50,000.

BIG RAPIDS, MICH.—We are informed that L. W. June, Cy. Engr., has prepared plans for 742 ft. of 10-in. pipe sewer in Mill St.

BLOOMINGTON, ILL.—W. P. Butler, Cy. Engr., writes us that on April 12 the contract for building 4,307 ft. of 33-in. and 2,977 ft. of 36-in. brick sewers, will probably be let to John Cherry, Jr., at $12,725. Average cut, 8½ ft.

WEST HAMMOND, ILL.—Bids are asked until April 21 for constructing a main brick and cast-iron pipe sewer and outlet in Lincoln Ave, and a tile pipe sewer in State St. John Hessler, Chn. Bd., P. O., Chicago.

WAUWATOSA, WIS.—The county supervisors are investigating systems for the proposed improvement of the system at the county institutions at Wauwatosa. The committee consists of Supervisors T. Y. McGovran, Wm. Ferriese and J. L. Bohn.

ST. PAUL, MINN.—Bids are asked until April 17 for constructing a sewer in Conway St. C. H. Bronson, Clk. Bd. Pub. Wks.

HUDSON, IA.—The question of building a system will probably soon be voted upon, according to reports.

LEAD, S. DAK.—The council has voted to issue $20,000 in bonds for the system, bids for which will soon be asked. Andrew Rosewater, Engr., Bee Bldg., Omaha, Neb.; Mason Tyler, Cy. Audr.

PITTSBURG, KAN.—E. W. Anderson, Cy. Clk., writes us that the city is asking for bids for about 2,000 ft. of 8-in. pipe sewer. It is proposed to also lay about 1½ miles of main sewer. O. G. Waite, Cy. Engr.

BROOKFIELD, MO.—E. E. Ward, Mayor, writes us that this place voted April 4 to issue $135,000 in bonds for a system.

WARRENSBURG, MO.—E. E. Clark, Mayor, writes us that an election was called for April 4 to vote on the question of sewerage.

PROVO, UTAH.—The question of building a system, it is stated, is being considered.

GALT, ONT.—The council has adopted the report of the committee and will take immediate steps towards the construction of a system. W. A. Dennis, Chn.

SYDNEY, AUSTRALIA.—Press reports state as follows concerning the electric sewage pumping plant at Sydney: The Minister of Works at Sydney has accepted the bid of the Clyde Engineering Works at $95,000, for the supply of electrical pumping machinery for use in low levels in connection with the sewerage system. The lowest American bid, sent by a manufacturing concern, was for $91,000, but Mr. Young accepted a local bid on the ground that it would pay the exceptional cost to have the work carried out under the eyes of the department.

GARBAGE DISPOSAL—STREET CLEANING

BINGHAMTON, N. Y.—The governor has signed the bill authorizing this city to contract for garbage disposal. E. E. Powell, St. Comr.

COHOES, N. Y.—The question of better methods of garbage disposal is being considered. A plant will cost about $8,300.

NEW YORK, N. Y.—The City Wastes Disposal Co. has been incorporated by F. M. Gibson, Jas. B. Dill and Wm. L. Church, 874 Broadway, all members of the staff of the late Col. Geo. E. Waring, Jr., and whose inventions it is proposed to use. Capital stock, $3,000,000.

CHESTER, PA.—It is stated that an incinerating plant for the disposal of garbage is to be built at Chester, and preliminary plans have been prepared. Several buildings will probably be erected, and the plant will be equipped with modern apparatus.

SACRAMENTO, CAL.—Dr. F. G. Fay, of the local board of health, writes us that it is bound to have a garbage crematory, and the city officials wish to correspond with firms manufacturing plants, with a view to the city's purchasing a plant outright. Bids will probably soon be asked. The plant must have a capacity of 40 tons a day, and will include street sweepings, night soil, dead animals, etc., but no sewage.

SYDNEY, AUSTRALIA.—Dr. Asburton Thomson, Pres. Bd. of Health, has recommended the construction of a garbage crematory. It is probable that Dr. Thomson will soon ask for bids from foreign manufacturers.

STREETS AND ROADS

BOSTON, MASS.—The city engineer has received the following bids for granite block paving: Bell & Co., $11,982; A. Libby & Co., $11,392; Patrick McGovern, $9,740; H. Gore & Co., $10,479.15; Daniel Lynch, $11,000; Coleman Bros., $11,600; James Lahey, $11,930.

REVERE, MASS.—Bids are asked by the Metropolitan park commission, 14 Beacon St., Boston, until April 24 for grading and surfacing the Revere Beach Parkway.

SOMERVILLE, MASS.—The board of aldermen has appropriated $10,000 for grading and $15,000 for paving.

WESTFIELD, MASS.—An appropriation of $3,000 has been made for macadamizing Washington St.

MERIDEN, CONN.—Bids are asked by the board of public works until April 27 for about 4,200 sq. yds. of sheet asphalt paving on North Colony St., as stated in our advertising columns. W. S. Clark, Cy. Engr.

BUFFALO, N. Y.—Bids are asked until April 18 for paving on Grosvenor and Ohio Sts. R. G. Parsons, Secy.

NEWPALTZ, N. Y.—The Newpaltz Turnpike Co. has been reorganized, with a capital stock of $14,000, by D. A. Hasbrouck, of Newpaltz, and others.

NEW YORK, N. Y.—A writ of mandamus was issued last Thursday on the petition of Stone & Thurston, Contractors, through their attorney, John C. Wait, requiring and commanding John F. Gouldsbury, as Auditor, and Bird S. Coler, as Comptroller of the City of New York, to audit and pay the claims of the contractors for paving 100th St., between First and Second Aves. This case is of special interest to contractors, in that it determines that the Department of Finance cannot hold up claims against the city for work and materials furnished and which have been approved and accepted by the inspector, engineer and commissioner of public works, by reason of adverse reports of the engineers and inspectors of other departments of the city, as the Commissioner of Accounts or the Department of Finance, unless they can show specific acts that constitute fraud and collusion. The determination of the Highway Department is conclusive, and any complaints of other officers will not excuse the Auditor and Comptroller in the performance of their duties which are held to be ministerial. This claim is one of many that have been held up in the Comptroller's office, at the suggestion of the Mayor's Commissioners of Accounts, but which it is expected the Comptroller will now pay, having no other alternative.

ROCHESTER, N. Y.—The following improvements have been proposed by the council: Stone St., asphalt paving, estimated cost, $12,000, brick, $12,000, or medina block, $13,800; Front St., asphalt, $21,000; Elm St., curb and gutter, $4,000; Reynolds St., macadam, $8,700; Child St., asphalt, $19,400.——A contract has been awarded to Brayer & Albaugh, at $47,710, for medina block paving on North Clinton St.

SAYVILLE (L. I.), N. Y.—A survey has been made for a new road from Railroad Ave. to Lincoln Ave.

UTICA, N. Y.—Resolutions have been adopted for paving portions of Broad St., Canal, Potter and Water Sts. Designations will be made April 21.——The city surveyor has completed plans for paving on Clinton Place, State and Henry Sts.

NEWARK, N. J.—Ordinances have been passed by the council to pave portions of six streets with sheet asphalt and College Place with granite blocks.

NEW BRUNSWICK, N. J.—The board of freeholders has awarded a contract to R. A. Montgomery, of Lambertville, at $7,650, for macadamizing the road from Cranbury to Cranbury Station.

PATERSON, N. J.—Bids are asked by the board of chosen freeholders until April 21 for grading and macadamizing the road through the Great Notch and the road from Mountain View to Singac Road.

PATERSON, N. J.—Bids are asked until 3 p. m., April 14, for grading portions of five streets. Thos. McLean, St. Comr.——The following bids have been received for asphalt paving: Marley & Forbes, $40,322; Paterson Construction Co., $40,183; New Jersey Asphalt Co., $40,819.50; George McDonald, $41,515.30.

TRENTON, N. J.—The following bids were received by the board of freeholders April 5 for macadamizing the Asylum Road, three miles, and the Upper Ferry Road, one mile, respectively: John W. Rehill, $15,250 and $5,100; Denis Roe, $11,554 and $3,849; Penn Construction Co., $12,980 and $3,980; R. A. Montgomery, $10,475 and $3,425; John H. Harley, $11,930 and $3,695; Geo. Bancroff, $12,398 and $3,997; W. Keighn, $13,500; W. F. McGovern, $13,600 and $3,859.

BRADFORD, PA.—Bids are asked by the city clerk until May 1 for brick paving on Elm St. P. B. Winfree, Cy. Engr.

ERIE, PA.—We are informed that appropriations have been made and that bids will be asked by the city engineer within four weeks for the following paving: Paving with brick, Holland St., from 8th to 14th, six 330-ft. squares, including two intersections, pavement 30 ft. wide; sheet asphalt pavement, 8th St. to 12th, four 330-ft. squares, 30-ft. pavement, no intersections; resurfacing Sassafras St., 12th to south of 14th. B. E. Briggs, Engr.

GREENVILLE, PA.—Bids are asked until April 25 for furnishing the material and for grading, curbing and brick paving of about 4,427 lin. ft. of streets, 24, 26, 28 and 30 ft. in width, as stated in our advertising columns. A. J. Gillespie, Borough Secy.

NAZARETH, PA.—Bids are asked until April 22 for constructing a half-mile of regulation race track for the Northampton County Agricultural Society, as stated in our advertising columns. O. H. Knecht, Secy.

PHILADELPHIA, PA.—Bids are asked until April 18 for grading streets and for constructing a retaining wall. Wm. C. Haddock, Dir. Dept. Pub. Wks.

PITTSBURG, PA.—It is proposed to pave the city streets this year, at a cost of about $229,595.

READING, PA.—Bids are asked by the city clerk until 3 p. m., April 13, for furnishing supplies for the department of highways and sewers and the board of public works, for one year. S. S. Hoff, Cy. Engr.

WEST CHESTER, PA.—It is reported that the citizens of North Coventry township voted April 7 to macadamize a stretch of road with 1,000 tons of crushed stone, and the supervisor was authorized to purchase a heavy roller.

CHARLOTTESVILLE, VA.—It is reported that the residents of Rivanna district held a meeting April 3, at Castalia, to consider the question of good roads. Resolutions were passed condemning the present county roads and favoring a county bond issue of $150,000 for immediate expenditure and $6,000 for yearly maintenance. A committee will present these resolutions to the convention to be held in Charlottesville on April 24 and 26.

PETERSBURG, VA.—The council has passed a resolution to pave on Sycamore St. with brick and granite blocks. It has also decided to pave on Second St. with granite and Bollingbrook St. with brick.

RICHMOND, VA.—The committee has recommended granite paving for First St., to cost $2,803, and Louisiana St., $5,598.

BENWOOD, W. VA.—Bids are asked until May 1 for brick paving, according to reports. M. Dolan, Chn. Com.

BLOUNTVILLE, TENN.—Reports state that the county has been authorized to issue $100,000 of road bonds.

CAMBRIDGE, O.—At the election April 3 it was voted to issue $8,000 of bonds for paving. Plans have not yet been completed. Bids will be asked as soon as possible. O. M. Hoge, Cy. Engr.

SHELBY, O.—Contracts for over two miles of street paving will be let about June 1.

CINCINNATI, O.—Bids will soon be asked by the board of city affairs for the paving of Spring Grove Ave. with asphalt from Draper St. to Hopple St.——A resolution has been passed to pave Fairview Ave. with asphalt. Edwin Henderson, Cy. Clk.

CLEVELAND, O.—Ordinances have been passed to grade, drain, curb and pave portions of six streets, and for sewers in three streets. Howard H. Burgess, Cy. Clk.

SPRINGFIELD, O.—Bids are asked until May 1 for furnishing the material and for constructing and repairing sidewalks. Philip Huonker, Cy. Clk.

TOLEDO, O.—Ordinances have been passed for the improvement of portions of 12 streets. Wm. O. Holst, Cy. Clk.

VANWERT, O.—Bids are asked until April 24 for about 28,500 sq. yds. of brick or asphalt, 10,410 lin. ft. of curb and 10,500 cu. yds. of excavation, according to reports. C. F. Manship, Village Clk.

ANDERSON, IND.—Bids will soon be asked by the city clerk for brick paving on 17th St., Fifth and 21st Sts.

ELWOOD, IND.—Bids are asked by the city clerk until 7:30 p. m. April 17 for about 12,000 sq. yds. of paving, 6,000 lin. ft. of curbing and 5,600 sq. yds. of sidewalk. John Finan, Jr., Cy. Engr.

FORT WAYNE, IND.—Bids are asked by the board of public works until May 4 for the paving of parts of five streets with sheet asphalt, asphalt block or vitrified shale block upon concrete foundation; estimate, about 27,000 sq. yds. F. M. Randall, Engr.; H. B. Manning, Cy. Clk.

INDIANAPOLIS, IND.—The board of public works has received petitions for the following improvements: St. Clair St., Massachusetts Ave. to Oriental, brick; Dorman, Michigan to 10th, brick; Ash, 14th to 21st, creosoted block; Yandes, 19th to 21st, cement walk; Stuart, 25th to Bloyd, cement walks; first alley east of New Jersey, 10th to 15th, brick.

MARION, IND.—The council has decided to pave on South Main St., Henley and Washington Sts. with brick.

MUNCIE, IND.—Bids are asked until April 24 for improving Howard and 15th Sts., according to reports. F. W. Clevenger, Cy. Clk.

ROCKVILLE, IND.—Bids are asked by the county commissioners until April 20 for the improvement of about 15⅓ miles of road in Florida township.

ROCKPORT, IND.—Bids are asked until April 21 for constructing about 12 miles of macadam roads. John G. Rimstidt, County Audr.

DETROIT, MICH.—The committee has recommended the following streets for paving: Jefferson Ave., asphalt; Atwater St., granite block; Hastings St., granite block; Martin Place, asphalt; Randolph St., asphalt; Woodbridge St., granite block.

HIGHLAND PARK, MICH.—Reports state that the question of paving Woodward Ave. is being considered. Estimated cost with asphalt, $110,000; brick, $75,000 and cedar on concrete, $60,000.

CHICAGO, ILL.—Bids are asked until April 18 for furnishing 9,800 cu. yds. of furnace slag and 2,450 cu. yds. of limestone screenings for Milwaukee and Archer Aves. L. E. McGann, Comr. Pub. Wks.

CHICAGO, ILL.—Bids are asked until April 19 for paving, curbing, guttering, laying sidewalks, planting trees and improving Fullerton Ave. as a Lincoln Park boulevard; also for curbing and guttering of Sheridan Road, in the town of Lakeview. Paul Redieske, Supt.——Bids are asked until April 19 for plank sidewalks on portions of 44 streets. L. E. McGann, Pres. Bd. of Local Impvts.

ST. PAUL, MINN.—The board of public works has awarded a contract to the Warren-Scharf Co., at $32,412, for paving on Cedar St., and to Hennessy & Cox, at $10,595, for asphalt on Washington St.

OMAHA, NEB.—About $15,000 may be spent by the board of park commissioners this summer for constructing the Southwest and Central Boulevards.

KANSAS CITY, MO.—Bids are asked until April 15 for furnishing the material and for constructing curb, plank sidewalks, granitoid sidewalks and sewers on certain streets. Henry A. Wise, Cy. Engr.

LONG BEACH, CAL.—Bids are asked until April 17 for grading Ocean Park Ave. Harry Barndollar, Cy. Clk.

ST. CATHARINES, ONT.—The board of works has recommended that bids be asked by the city clerk for a rock crusher, according to reports.

TORONTO, ONT.—The city engineer has recommended the following work, according to reports: Asphalt, Huron St., $6,960; macadam, Grenville St., $7,450; cedar block, Beatty Ave., $2,170; William St., $4,360; De Grassi St., $4,360; Sackville St., $1,790; brick, Bathurst St., $8,930; Prince Arthur Ave., $8,070; Lippincott St., $6,930; cement concrete walks, Huron St., $442; Queen St., $1,036.

FREDERICTON, N. B.—Reports state that the Premier proposes to purchase rock crushers and road rollers for macadamizing in different parts of the province.

MANUFACTURING PLANTS.

CAMBRIDGE, MASS.—The Bay State Metal Works and the Riverside Boiler Works were destroyed by fire April 7; reported loss, about $75,000.

NEW YORK, N. Y.—Plans have been filed by the Central Brewing Co. for a 5-story brick and stone brewery, to be erected at 68th and Exterior Sts., to cost $145,000. William Greisser, Arch.

WEST POINT, N.Y.—Bids are asked until May 11 for an ice-making plant and cold storage system at West Point, as stated in our advertising columns. Address Maj. Wm. F. Spurgin, Q. M., West Point.

WOODBINE, N. J.—The Universal Lock Co., 56 Liberty St., New York, informs us that it wishes bids for the construction of an addition to its factory at Woodbine; two stories, brick, 34x122 ft.

McKEE'S ROCKS, PA.—A. Winter & Son, of Allegheny, have the contract at $14,000, for excavating for the foundation piers, trenching and sewering for the new plant of the Pressed Steel Car Co.

YORK, PA.—Reports state that the York Mfg. Co. will erect a 40 × 63 ft. foundry building for making charcoal iron and gun metal castings. A malleable iron shop will also be constructed. About $100,000 will be spent on the improvements.

BALTIMORE, MD.—Plans have been completed for a brewery to be built by Frederick Bauernschmidt. The Fred W. Wolf Co., Archs., Chicago.

PORTSMOUTH, VA.—Reports state that the Cedartown Cotton Co. will establish a factory in Portsmouth to manufacture brown cotton.

CALDWELL, W. VA.—It is reported that the West Virginia Pulp & Paper Co. will erect a new pulp mill in this city for the manufacture of fine book paper at a cost of about $1,500,000.

LELAND, MISS.—Reports state that a new cotton oil mill will be constructed in this city. H. A. Mullaly, Vicksburg, Miss., has the contract.

CHICAGO, ILL.—Plans are being made for a four-story factory building for the Acme Flexible Clasp Co. to be erected in So. Clark St. Hessenmueller & Meldahl, Archs.

SIOUX FALLS, S. DAK.—Reports state that the Sioux Falls Sugar Beet Co., which will be incorporated with a capital of $500,000, proposes to erect a beet sugar factory this summer. Among those interested are John M. Francis, Chicago; Maj. P. R. Bailey and Porter B. Beck.

SILVERTON, COLO.—The Gates Iron Co., of Chicago, has the contract for the erection of mills for the Red & Bonita Mountain Gold & Silver Mining Co., near Silverton, Colo.

SAN ANTONIO, TEX.—The Business Men's Club of this city offers to aid in the establishment of a cotton factory, woolen mill, leather products or cannery in San Antonio, by experienced parties.

BELLEVILLE, ONT.—Reports state that plans have been prepared for the rolling mills to be built by the Abbott-Mitchell Rolling Mills Co.

KINGSTON, ONT.—Plans have been completed, according to reports, for the new Abbott-Mitchell rolling mills to be erected at Kingston. F. T. Pocock, Engr., Montreal, Que.

STURGEON FALLS, ONT.—Bids are asked by the Sturgeon Falls Pulp Co. until April 15 for the erection of a 267 x 70 ft paper mill building.

GAS PLANTS.

PITTSFIELD, ME.—Reports state that the Pittsfield Electric Light & Power Co. has been organized with a capital stock of $50,000, to supply gas or electricity, or both, in the township of Pittsfield; population, about 4,000. A. B. Locke, Pres.; Frank L. Smith, Treas.

UTICA, N. Y.—A franchise has been granted to the Herkimer County Light & Power Co. to lay and maintain gas mains through the city. Thos. E. O'Shea, Pres.

NEW BRUNSWICK, N. J.—Reports state that Rogers, Brown & Co., 31 Nassau St., New York, have completed negotiations for the purchase of the stock and plant of the New Brunswick Gas Light Co., at $405,000.

WAYNESBURG, PA.—It is reported that Andrew Carnegie is contemplating the construction of a pumping station in Franklin township to force gas to the plant at Homestead.

CINCINNATI, O.—The light committee is considering the question of lighting the city by the Wellsbach incandescent burner, according to reports.

VINCENNES, IND.—Bids are asked until May 22 for furnishing and maintaining about 175 70-c. p. Wellsbach gas lamps, for ten years. Chas. Laugel, Cy. Clk.

DETROIT, MICH.—George B. Banton, John E. Molony and others have applied to the council for a franchise to do a gas business.

CHICAGO, ILL.—The Ogden Gas Co. has completed plans for a new plant, to have a capacity of 10,000,000 cu. ft.

ELGIN, ILL.—It is reported that the Elgin American Gas Co. will construct a new plant of 500,000 cu. ft. capacity daily.

OTTAWA, ILL.—The Ottawa Gas, Light & Coke Co. has decided to expend about $25,000 for new machinery and apparatus. W. H. Hull, Pres.; A. D. Cressler, Secy. and Treas., Fort Wayne, Ind.

MINNEAPOLIS, MINN.—The council has awarded a contract to the Minneapolis Gas Light Co. for street lighting for one year.

CORSICANA, TEX.—It is reported that L. M. Coates, Rufus Hardy and others have incorporated a company to develop oil wells near this place.

NEW WHATCOM, WASH.—W. S. Wharton, Supt. of the Bellingham Bay Gas Co., writes us that the proposed new water gas plant will probably be constructed by the Western Gas Construction Co., Fort Wayne, Ind. There will be no bonds issued, as the company has ample funds for all contemplated improvements.

SPOKANE, WASH.—The Western Gas Construction Co., Fort Wayne, Ind., has been awarded a contract, at $20,000, for reconstructing the plant of the Spokane Falls Gas Light Co.

MONTREAL, QUE.—Bids are asked by the Gall, Schneider Oil Co., Ltd., until May 10 for constructing four steel oil tanks of 1,000,000 gallons capacity.

NEW COMPANIES.—Tennessee Gas & Coke Co., Knoxville, Tenn.; $500,000; to construct coke ovens and lay mains to supply fuel gas; Frank S. Hambleton, Baltimore; Thos. J. Fender, New York; H. L. McClung, Knoxville.

Oakland Oil & Asphaltum Co., Oakland, Cal.; $6,400; J. W. Tompkins, L. Jurgens, F. M. Farwell.

Standard Acetylene Gas Co., Portland, Me.; $500,000, with $600 paid in; to manufacture acetylene gas machines; J. B. Holmes, Pres.; Geo. A. Severance, Treas.

Port Chester Gas & Coke Co., Port Chester, N. Y.; $50,000; W. L. Ward, Addison Johnson, Geo. A. Blakeslee, all of Port Chester.

Brooklyn Gas & Electric Light Co., Brooklyn, N. Y.; $1,500,000; H. S. Tourny, Maurice Landauer and Frank M. Weigman, all of New York.

Tuscarawas Oil & Gas Co., Columbus, O.; $10,000; to prospect for oil and gas; George R. Kauffman, Fred. W. Hebst, J. H. Beal, all of Columbus.

Sandusky Gas & Electric Co., Sandusky, O.; $500,000; Thos. B. Hoxsey, Clark Rude, Fred. G. Hiltz.

People's Gas & Electric Co., Peoria, Ill.; $500,000; to furnish gas, electricity, heat and power; O. J. Bailey, Philo B. Miles, Sumner R. Clark.

Farmers Oil Gas & Mineral Co., Cooperdale, O.; $5,000; Geo. Crawford, Wm. Phillips, H. B. Dougherty.

Southwestern Oil Co., Houston, Tex.; $100,000; B. F. Bonner, John K. Kirby, Robt. W. Wier.

Sutherland Construction & Improvement Co., Jersey City, N. J.; $100,000; to construct and operate gas works, electric light and power plants, and street railways; A. M. Sutherland, U. S. Grant and William Mainland.

MISCELLANEOUS CONTRACTS.

TELEPHONES.—Anderson, Ind.—A franchise has been granted to Jas. J. Netterville for a telephone system.

RETAINING WALL.—Rockville, Conn.—The council has decided to construct a stone retaining wall on the west side of Market St., to cost $2,503.

STREET SIGNS.—Newport, Ky.—Bids are asked until April 19 for furnishing and putting up enameled steel street signs. W. L. Glazier, Cy. Engr.

FIRE APPARATUS.—Kingston, Ont.—The fire and light committee has recommended the purchase of an aerial truck and ladders, according to reports.

TELEPHONES.—Superior, Wis.—The Peoples Telephone Co., of Superior, has applied to the council for a franchise to construct and operate a telephone system.

MACHINERY, ETC.—Boston, Mass.—Bids are asked until April 18 for furnishing machinery and tools. Edwin Stewart, Paymaster Gen., Navy Dept., Washington.

DOCKS.—Duquesne, Pa.—Jutte & Foley, Pittsburg, have been awarded a contract for new coal docks, requiring 1,500 piles and 2,000 ft. of lumber, for the Union R. R.

POLICE SIGNAL SYSTEM.—Los Angeles, Cal.—A contract has been awarded to the Ganewell Police Signal & Fire Alarm Co., at $9,975, for installing a police signal system.

BROKEN STONE.—New York, N. Y.—Bids are asked by the department of parks, Arsenal, Central Park, until April 20 for furnishing broken stone and trap rock screenings.

NAVAL SUPPLIES.—Portsmouth, N. H.—Bids are asked until April 18 for furnishing copper rod, lumber, hardware, etc. Edwin Stewart, Paymaster Gen., Navy Dept., Washington.

DIPPER DREDGES.—Chattanooga, Tenn.—Bids are asked until May 13 for constructing two dipper dredges, as stated in our advertising columns. Maj. Dan. C Kingman, U. S. Engr.

DREDGING.—Peekskill, N. Y.—Bids are asked until May 8 for dredging in Peekskill Harbor, as stated in our advertising columns. Col. J. W. Barlow, U. S. Engr., Army Bldg., New York.

REMOVING RESERVOIR.—New York, N. Y.—Bids are asked by the department of parks, Arsenal, Central Park, until April 27 for removing the 42d St. reservoir, and for other work in the 19th ward.

PARK.—Minneapolis, Minn.—The park commissioners have detained Warren H. Manning, of Boston, who is now in the city, to prepare plans for laying out Lyndale Park, north of Lake Harriet.

WHARF.—Cleveland, O.—Bids are asked until 2 p. m. April 13 for constructing a wharf for a life saving station. Horace L. Piper, Acting Gen. Supt., U. S. Life Saving Service, Washington.

DRY DOCK.—Mare Island, Cal.—Bids are asked until June 10 for constructing a timber dry dock; appropriation, $825,000. M. T. Endicott, Ch. Bureau of Yards and Docks, Navy Dept., Washington.

TELEPHONES.—Bloomington, Ind.—The Bloomington Telephone Co. has awarded a contract to the Stromberg-Carlson Telephone Mfg. Co., Chicago, for an equipment of telephones and a switchboard.

DREDGING.—Baltimore, Md.—Bids are asked until May 18 for dredging the ship channel leading to the harbor, at Baltimore, as stated in our advertising columns. Col. Peter C. Hains, U. S. Engr., 812 St. Paul St.

TELEPHONES.—Waterbury, Conn.—The Waterbury Telephone Co. has been incorporated with a capital stock of $25,000, to construct a system in the town. Harold R. Durant, Pres.; Arthur J. Purington, Secy. and Treas.

LOCK AND DAM.—St. Louis, Mo.—Bids are asked until May 6 for the construction of lock and dam No. 1, Brennekes Shoal, Osage River, as stated in our advertising columns. Capt. H. M. Chittenden, U. S. Engr., 1515 Locust St.

TELEPHONE WORK.—Reading, Pa.—The Pennsylvania Telephone Co. has appropriated $100,000 for the extension and improvement of its lines in Berks county. The new lines will extend about 75 miles, and the wire will cost about $10,800.

ABOLISHING GRADE CROSSINGS.—Springfield, Mass.—Plans are being prepared by the city engineer for raising the grade of the New England R. R. through this city, instead of lowering it, as at first proposed; estimated cost, $150,000.

TELEPHONE WORK.—Springfield, Mass.—The telephone company has applied to the council for permission to construct about six miles of conduits at a cost of $32,000, and for furnishing and laying the wire, at a cost of $8,000. Manager Daboll may be addressed.

CONCRETE SUPERSTRUCTURE.—Buffalo, N. Y.—Bids are asked until May 10 for constructing the concrete superstructure on the breakwater at Buffalo Harbor, as stated in our advertising columns. Maj. T. W. Symons, U. S. Eugr., D. S. Morgan Bldg.

TELEPHONE WORK.—Pekin, Ill.—A new plant will be constructed by the telephone company, including 11,000 ft. of cable, at a cost of about $6,300, and new switchboards, generators, etc., at $3,007. Work will be commenced about May 1. E. J. Garland, Mgr.

LEVEE WORK.—West Memphis, Ark.—Bids are asked by the St. Francis levee board until May 6 (postponement from April 17) for constructing 11 miles of new levee, containing about 1,248,000 cu. yds. of material, as stated in our advertising columns. Hugh R. McVeigh, Secy.

TELEPHONE SYSTEM.—Pittsburg, Pa.—The Pittsburg & Allegheny Telephone Co. has awarded a contract to Booth & Flinn, Baltimore, Md., for constructing conduits, subways and pole lines. J. L. D. Speer, Pittsburg; Alexander Brown and Geo. R. Webb, of Baltimore, are interested.

DREDGING.—New London, Conn.—Bids are asked until May 10 for dredging in Pawcatuck River, R. I. and Conn., and Connecticut River, Conn.; also for dredging in Five-Mile River and Norwalk Harbor, Conn, as stated in our advertising columns. Maj. Smith S. Leach, U. S. Engr., New London.

RETAINING WALL.—Homestead, Pa.—The Union R. R. Co. has awarded a contract to Patton & Gibson, of Pittsburg, Pa., for the construction of a large retaining wall between its track and the main line of the Monongahela division of the Pennsylvania R. R., south of Homestead. Work will be commenced at once.

DRY-DOCK.—Baltimore, Md.—The Wm. Skinner & Sons Ship Building & Dry-Dock Co. was incorporated March 29, with a capital stock of $300,000, to construct a dry-dock 600 ft. long and to conduct a general ship building business. The incorporators are Henry Williams, Decatur H. Miller, Jr., Robert Ramsey and others.

AIR POWER PIPES.—New York, N. Y.—At a meeting of the sinking fund commissioners, which was held April 7, the application of the American Air Power Co. for permission to lay two mains across 13th Ave. to connect with the power house at 25th St was granted, and the compensation fixed at $465 per year, with $100 for opening the street.

CONTRACT PRICES.

SEWERS.—Havana, Ill.—H. C. Breidert, Cy. Engr., informs us the following bids were received April 1, 1899, for brick and pipe sewers, as advertised in Engineering News; prices include trenching, backfilling and constructing complete; also materials; sandy soil; average cut for sewer—48-in., 16.8 ft.; 24x36-in., 15.5 ft.; 22x33-in., 13.5 ft.; 12-in. pipe sewer, 9.2 ft.; contract awarded J. H. Green & Sons:

Quantities.			H. G. Bruning, Havana, Ill.	J. H. Roche, 210 31st St., Chicago, Ill.	J. W. Pierce, Jacksonville, Ill.	J. H. Green & Sons, Appleton, Wis.
Sewer:						
48-in. brick	1,055	lin. ft.	$5.20	$4.90	$4.10	$3.40
24x36-in. brick	800	" "	3.90	2.85	2.70	2.55
22x33-in. "	400	" "	3.20	2.15	2.50	2.23
12-in. pipe	420	" "	1.70	.84	.65	.73
Catchbasins	21	each	24.00	30.00	33.00	35.00
Manholes	13	"	16.00	25.00	31.00	40.00
House slants	120	"	.30	.50	.50	.50
Total			$11,348	$9,677	$8,915	$8,141

GRADING RAILWAY.—Clinton, Mass.—The following bids were received by the Metropolitan Water Board, Boston, April 4, 1899, for grading a portion of a railway in Wachusett reservoir, near South Clinton, as advertised in Engineering News; Moulton & O'Mahoney received the contract.

Bidder.	Earth, 20,000 cu.yds.	Rock, 100 cu.yds.	Total.
Moulton & O'Mahoney, Boston	$0.14	$0.38	$2,838
Newell & Snowling C. Co., Uxbridge	.15	.90	3,090
J. D. Gennaro, Boston	.15	.97	3,097
Chas. N. Taylor, Clinton	.15	1.20	3,120
Neill Devine, Clinton	.15⅜	1.19	3,194
Cenedella Bros., Milford	.18	1.25	3,725
W. H. Maxwell, Jamaica Plain	.19	1.35	3,935
Bruno & Salomone, E. Boston	.21	1.45	4,345
Coleman Bros., Charlestown	.25	1.50	5,150
Mich'l F. McCarthy, Boston	.25	2.00	5,200

WATER PIPE.—Yonkers, N.Y.—The following bids were received by the water commissioners April 6, 1899, for furnishing 206 lengths of 8-in. pipe, weighing 600 lbs. each, and 208 lengths of 6-in., each of 400 lbs.: W. J. Drummond & Co., $24; Utica Pipe Foundry Co., $24.40; R. D. Wood & Co., Philadelphia, $23.75; Warren Foundry & Machine Co., $24.90; United States Cast-Iron Co., $24.90; Fox & Angel, New York, $25.40. Jno. C. Shotts, Pres. Bd.

SURFACING STREETS.—Clinton, Mass.—We are informed that the following bids were received on April 4, by the Metropolitan Water Board for surfacing Sections 1 and 2 of Boyleston St., Clinton and Boylston:

Bids Received at Boston, Mass., April 4, 1899, for Surfacing Sections 1 and 2 of Boyleston St.

Bidder.	Section 1.			Section 2.		
	Shaping surface roadbed, 8,275 lin. ft.	Broken stone in place, 5,800 tons.	Total.	Shaping surface roadbed, 7,450 lin. ft.	Broken stone in place, 5,600 tons.	Total.
Newell & Snowling Construction Co., Uxbridge, Mass.	*$0.07	*$1.90	*$11,599	$0.11	$1.90	$11,460
Asa Goddard, Worcester, Mass.	.12½	1.90	12,054	*.13	*1.80	*11,049
A. J. Wellington, Newton, Mass.	.15	1.90	12,261	.15	1.80	11,198
M. Murphy & Co., Clinton, Mass.	.20	1.90	12,675	.20	1.95	12,410
T. H. Gill, Somerville, Mass.	.17	1.95	12,717	.17	1.95	12,187
Coleman Bros., Charlestown, Mass.	.29	1.85	13,130	.28	1.85	12,446

*Awarded contracts.

EXCAVATING.—Yazoo River, Miss.—We are informed that the folowing bids were received April 5, 1899, by Maj. J. H. Willard, U. S. Engr., Vicksburg, Miss., for excavating 7,500,000 cu. yds. for diverting the mouth of the Yazoo River, as advertised in Engineering News:

Bidder.	A cu.yd., cts.	Total.
Washburn & Washburn, Chicago, Ill.	12.25	$918,750
John Shields, Flemington, N. J.	9.87	740,250
G. M. Garvey & Co., Memphis, Tenn.	22.5	1,687,500
Stone, Sand & Gravel Co., New Orleans	8.49	636,750
Hingston & Woods, Buffalo, N. Y.	11.5	862,500
Atlantic, Gulf & Pacific Co., New York.	8.89	666,750
Rittenhouse-Moore Dredg. Co., Mobile.	16.0	1,200,000
Charles Clarke & Co., Galveston, Tex.	9.4	705,000
Christie, Lowe & Heyworth, Chicago, Ill.	9.5	712,500

SEWERS.—Washington, D. C.—The following bids were received by the District Commissioners, April 8, 1899, for constructing sewers:

Items.	E. G. Gunnell		John P. Larque		Adam McCandlish	
Sewers	A.	B.	A.	B.	A.	B.
Excavation, a cu. yd.	$0.49	$0.49	$0.60	$0.43	$0.48	$0.40
Brick masonry, a cu.yd.	9.50	9.50	8.75	8.75	8.50	8.50
21-in. pipe, a lin. ft.	.59	.59	.65	.65	.47	.50
18-in. " " "	.52	.52	.55	.55	.37	.43
12-in. " " "	.42	.42	.37	.37	.33	.30
10-in. " " "	...	.40	...	.32	...	.26

STORM SEWER.—Plainfield, N. J.—Andrew J. Gavett, Engr.-in-Charge, informs us that the following bids were received April 3, 1899, for constructing a storm sewer in Park Ave.; contract awarded P. Christmas:

Items.	P. Christmas, Plainfield.	A. P. Hamblen, E. Orange.
24-in. sewer	$1.09	$1.11
Manholes	37.00	40.00
Branches on 24-in. sewer	3.25	3.65
Branches on 12-in. sewer	1.45	.85
12-in. basin connections	.36	.56
6-in. house conns (roof water)	.28	.40
Catchbasins	25.00	33.00
Inlets	14.00	12.00

SAND.—Washington, D.C.—The following bids have been received by the District Commissioners for furnishing 1,000 cu. yds. of sand to the bathing beach: Columbia National Sand & Dredging Co., 40 cts.; John Miller & Co., 48 cts.; John B. Low, 45 cts.

STREET CLEANING, ETC.—Washington, D. C.—Warner Stutles, Supt. Street Cleaning Dept., informs us that the following contracts were let April 10, 1899, for street cleaning, as advertised in Engineering News; the commissioners have not yet decided whether to let the contracts run for one, two or three years: Machine sweeping, Lilly & Robinson, Indianapolis, Ind., 19 cts. a 1,000 sq. yds. for one, two or three years; cleaning paved alleys, Daggett & Dugan, Washington, 33 cts. a 1,000 sq.

yds.; hand cleaning, Daggett & Dugan, 21¼ cts for either term of years; cleaning unpaved streets and alleys, R. V. Rusk, Washington, $66.50 a day for one year; $66.25 a day for two years, and $65.50 a day for three years.

BRICK PAVING.—Gloversville, N.Y.—The following bids were received March 28, 1899, for brick paving; the contract at first was let to Erbeck Bros. for Porter brick, but was subsequently reconsidered on account of a legal error, and all the bids rejected, new ones to be received in about two weeks:

Bidder.	Brick, 1,500 yds. Porter.	Park.	Syracuse.	Concrete, 250 cu.yds.	Curb, set'g, 7,800 lin.ft.	Headers, 200 lin.ft.
A. M. Banker[1]	$1.995	$2.15	$1.945	$3.50	$3.30	$0.40
Baker & Judson[1]	2.04	...	2.04	4.00	.21	.35
C. T. Hookway[2]	...	...	2.05	3.45	.22	.40
Callanan Road Co[3]	1.97	2.05	2.00	5.00	.27	.30
Frank Pidgeon[4]	2.09	2.20	2.13	4.50	.28	.45
J. Twomey[5]	...	2.13	2.03	4.00	.24	.65
Erbeck Bros.[6]	1.91	1.96	1.94	4.50	.26	.61

---

[1] Gloversville, N.Y.; [2] Syracuse, N.Y.; [3] Albany, N.Y.; [4] Saugerties, N.Y.; [5] Schenectady, N.Y.; [6] Homestead, Pa.

SEWER BRICK.—Washington, D. C.—The following bids were received by the district commissioners March 25, 1899, for furnishing 50,000 vitrified inverted sewer brick: J. H. Guise, Williamsport, Pa., $25 a 1,000; the Savage Fire Brick Co., Keystone Junction, Pa., $23.50

ASPHALT PAVING.—Joliet, Ill.—Geo. W. Brown, Cy. Engr., informs us that the following bids were received March 20 for asphalt paving, curbing and grading:

Bids Received at Joliet, Ill., March 20, 1899, for Asphalt Paving, Curbing and Grading in Eastern Ave.

Quantities.		Warren-Scharf Asphalt Pvg. Co.	R. F. Conway & Co.	Indiana Bermudez Co.	Jas. A. Sackley.	Bermudez Asphalt Pvg. Co.
Asphalt paving, 6-in. conc. fndatn & bindr.	15,200 cu. yds.	$1.75	$1.51	$1.89	$1.685	$1.92
Curbing, excavating and backfilling	9,900 lin. ft.	.38	.33	.20	.25	.45
Excavation	7,400 cu. yds.	.30	.25	.02	.10	.30
Crosswalk headers set	54 each	3.75	3.00	1.50	3.00	7.50
Oak headers in place	2,000 ft. B.M.	28.00	30.00	3.00	30.00	35.00
Manhole covers, set to grade,	21 each	2.00	3.00	3.50	3.00	7.50
Catchbasin covers, set to grade	42 "	2.00	3.00	2.00	3.00	7.50
Concrete over 6 ins. in st. r'y right-of-way	357 cu. yds.	3.00	2.10	4.25	2.25	4.75
Totals		$34,038	$29,230	$32,618	$30,041	$38,502

The following are the bids on the other streets where they are different from the above; the same companies bid on all the work; (1) being for the Warren-Scharf Asphalt Paving Co., 81 Fulton St., New York; (2) R. F. Conway & Co., Chicago; (3) the Indiana Bermudez Co., Indianapolis; (4) Jas. A. Sackley, 138 Washington St., Chicago; (5) the Bermudez Asphalt Paving Co., 100 Washington St., Chicago: South Chicago St., 13,700 yds.—(3) $1.87, (4) $1.67; Curbing, 6,400 ft.—(3) 23 cts., (5) 40 cts.; Excavation, 6,000 yds.—(3) 5 cts.; Crosswalk headers set, 75—(2) $3.65, (4) $4.00, (5) $3.00; Oak headers in place, 3,000 ft.—(5) $30.00; New catchbasins and connections complete, 48—(1) $27.50 each, (2) $25.00, (3) $12.50, (4) $25.00, (5) $30.00; New manholes complete, 6—(1) $25, (2) $20, (3) $5, (4) $20, (5) $18; Concrete in street railway right-of-way. 684 cu.yds.—(3) $4.70, (5) $5.00; Totals—(1) $33,094, (2) $27,819, (3) $31,357, (4) $28,328, (5) $35,947, Herkimer St., 10,400 yds.—(1) $1.70, (3) $1.87, (4) $1.69, (5) $1.91; Curbing, 5,800 ft.—(3) 40 cts, (5) 42 cts.; Excavation, 6,000 yds.—(3) 30 cts.; Crosswalk headers set, 24—(3) $5, (4) $3.50; Oak headers, 900 ft.—(3) $30; Manhole covers set to grade, 17—(3) $5; Catchbasin covers set to grade, 37—(3) $5, (4) $4; Totals—(1) $21,907, (2) $19,622, (3) $23,985, (4) $19,936, (5) $24,717. North Chicago St., 9,900 yds.—(2) $1.50, (4) $1.69; Curbing, 300 ft.—(1) 50 cts., (2) 45 cts., (3) 50 cts, (4) 45 cts., (5) 55 cts.; Excavation, 1,500 yds.—(1) 20 cts., (3) 30 cts., (4) 23 cts., (5) 35 cts.; Crosswalk headers set, 26—(2) $4.65, (3) $5.00, (4) $5.00, (5) $12.50; Oak headers in place, 1,400 ft.—(3) $30; Flushing sidewalk or curb walls, 320 sq. yds.—(1) 85 cts.; (2) 30 cts., (3) $1.50, (4) $1.00, (5) $2; Manhale covers set to grade, 4—(3) $5; Catchbasin covers set to grade, 2—(3) $5; (4) $4; New catchbasins and connections, 18—(1) $27.50 each, (2) $30; (3) $25, (4) $25, (5) $30; Concrete in street railway right-of-way, 228 cu. yds.—(3) $4.70, (4) $2.50, (5) $5; Totals—(1) $19,375, (2) $16,656, (3) $21,515, (4) $19,143, (5) $22,437. Cass St., 6,500 yds.—(3) $1.87, (4) $1.64; Curbing, 850 ft.—(1) 43 cts., (2) 39 cts., (3) 41 cts., (4) 38 cts.; Excavation, 2,400 yds.—(3) 25 cts.; Crosswalk headers set, 24—(3) $5; Oak headers in place, 900 ft.—(3) $5; Manhole covers set to grade, 12—(3) $4; Catchbasin covers set to grade, 13—(3) $4, (4) $4; Concrete in railway right-of-way, 325 yds.—(3) $4.35; Totals—(1) $13,592; (2) $11,603; (3) $14,742; (4) $11,931; (5) $15,512. The contracts have been let to the Richard F. Conway & Co., 306 Chamber of Commerce Bldg., Chicago.

SEWERS.—Kearney, N. J.—We are informed that the following bids were received on March 28, for constructing sewers, including 2 miles of storm water sewers, in the southwesterly section of the city; W. S. Logan, Town Engr., Arlington, N. J.; contract let to James Conway:

Bids Received at Kearney, N. J., March 28, 1899, for Constructing Sewers in Section No. 2.

Bidder.	6-in. pipe, 200 ft.	15-in. pipe sewer, 770 ft.	10-in. pipe sewer, 850 ft.	Manholes, 9, each.	Junct'n manholes, 3, each.	Basins, 4, each.	Manhole and flush-tank.	15×6" house Y's, 24, each.	10×6" house Y's, 60, each.	Total.
James Conway, Newark, N. J.	$0.24	$0.80	$0.55	$30.00	$30.00	$80.00	$100.00	$0.65	$0.35	$1,948
Henry M. Dowd, Orange,	.30	1.16	.67	38.00	40.00	90.00	120.00	1.00	.75	2,534
Carlson & Levison, Kearney	.25	.97	.65	27.00	31.00	80.00	110.00	2.00	1.42	2,249
Edward Sargent, Kearney	.22	.83	.63	26.50	28.00	76.00	85.00	.65	.35	1,967
A. Costa, Orange	.45	1.00	.88	38.00	38.00	53.00	90.00	1.23	.69	2,437
Green & Tierney, Kearney	.45	.80	.75	30.00	31.00	80.00	110.00	2.00	1.54	2,149

The following are the prices at which the contracts were let for Sections 1, 3 and 4: Section No. 1.—Edward Sargent, Kearney, 6-in. house connections, 2,604 ft., 22 cts.; 15-in. pipe sewer, 704 ft., 82 cts.; 12-in. pipe sewer, 650 ft., 67 cts.; 10-in. pipe sewer, 500 ft., 64 cts.; manholes, 10, $26.50 each; junction manholes, 2, $28; basins, 7, $76 each; manholes and flushtanks, 2, $85 each; Y's, 15×6-in., 20, 65 cts. each; 12×6-in., 50, 35 cts; 10×6-in., 40, 45 cts.; total, $2,977. Section No. 3—James Conway & Co., Newark, N. J., 6-in. house connections, 650 ft., 24 cts.; 18-in. pipe sewer, 510 ft., 98 cts.; 15-in. pipe sewer, 260 ft., 85 cts.; 12-in. pipe sewer, 985 ft., 52 cts.; 10-in. pipe, sewer, 1,455 ft., 48 cts.; manholes, 14, $30; junction manholes, 4, $30 each; basins, 8, $80 each; manholes and flushtanks, 4, $95 each; Y's, 10×6-in., 124, 35 cts.; 12×6-in., 36, 45 cts.; 15×6-in., 16, 65 cts.; 18×6-in., 32, 85 cts.; total, $3,745. Section No. 4—James Conway & Co., 6-in. pipe house connections, 3,000 ft., 23 cts.; 30-in. pipe, 550 ft., $2; 24-in., 510 ft., $1.15; 18-in. pipe, 565 ft., 84 cts.; 15-in., 670 ft., 60 cts.; 12-in., 2,325 ft., 47 cts.; 10-in. pipe, 1,350 ft., 43 cts.; manholes, 22, $30; junction manholes, 8, $30; basins, 23, $80; manholes and flushtanks, 5, $95; Y's, 10×6-in., 136, 35 cts.; 12×6-in., 128, 45 cts.; 15×6-in., 46, 65 cts.; 18×6-in., 46, 85 cts.; 24×6-in., 32, $1.64; 30×6-in., 36, $2.75; total, $8,377.

EXCAVATING, ETC.—Clinton, Mass.—The following bids were received by the Metropolitan Water Board, 3 Mount Vernon St., Boston, Mass., April 4, for excavating soil from Section 4, Wachusett reservoir, and excavating and refilling at easterly portion of North Dike, Clinton, as advertised in Engineering News; contract awarded Moulton & O'Mahoney:

Bids Received at Boston, Mass., April 4, 1899, for Excavation and Backfilling, Wachusett Reservoir.

Bidder.	Clearing and grubbing, 245 acres.	Excavation Soil, 275,000 cu.yds.	Excavation Earth, 40,000 cu.yds.	Masonry Concrete, 45 cu.yds.	Masonry Brick, 17 cu. yds.	Masonry Split stone, 9 cu. yds.	Dry paving, 25 cu.yds.	Total.
Moulton & O'Mahoney, Boston, Mass.	$70.00	$0.33	$0.20	$5.00	$14.00	$12.00	$3.00	$116,546
Jos. D. Gennaro, Boston, Mass.	10.00	.37	.30	6.00	13.00	10.00	2.00	116,831
Nawn & Brock, Boston, Mass.	75.00	.33	.18	5.00	13.00	9.00	3.00	116,927
Coleman Bros., Charlestown, Mass.	75.00	.31	.33	7.00	14.00	10.00	4.00	117,568
Cenedella Bros., Milford, Mass.	150.00	.31	.24	4.50	18.00	10.00	1.00	132,224
Long & Little, Leominster, Mass.	75.00	.365	.365	6.00	15.00	10.00	3.00	134,040
Bruno & Salomone, East Boston, Mass.	75.00	.40	.35	5.00	15.00	12.00	4.00	143,063
Newell & Snowling Const'n Co., Uxbridge, Mass.	150.00	.37	.15	7.00	15.00	10.00	5.00	145,285
Holbrook, Cabot & Daly, Boston, Mass.	50.00	.63	.27	6.00	15.00	12.00	2.00	196,983

LAYING WATER PIPE.—Grass Valley, Cal.—The following bids were received March 21, 1899, for laying 4-in. cast-iron water pipe in Conway St.: Martin Sampson, 12½ cts. a ft.; M. S. Ferguson, 13½ cts.; W. J. Martin & Co., 12½ cts.; George Stacey, 17 cts.; J. O. Morris & Co., 13½ cts.; A. L. Fisher, 11½ cts. (accepted); J. W. Griffiths and Chas. P. Whiting, 12½ cts.; Alex. Beaudowin, 12¼ cts.

LAYING WATER PIPE.—St. Paul, Minn.—Local papers state that Patrick Doherty has been awarded the contract at 25 cts. a ft. for laying 6-in. cast-iron water pipe.

DREDGING AND DOCKS.—Chicago, Ill.—We are informed that the following bids were received March 28, by Maj. W. L. Marshall, U. S. Engr., for dredging and constructing 4,782 lin. ft. of docks in the Chicago River, as advertised in Engineering News:

Bids Received at Chicago, Ill., March 28, 1899, for Dredging and Docks, in the Chicago River.

Quantities.		Green's Dredging Co., Chicago.	Lydon & Drews Co., Chicago.	Samuel O. Dixon, Milwaukee, Wis.	Chicago Star Const'n Co., Chicago.	FitzSimons-Connell Co., Chicago.
Dredging	231,500 cu. yds.	$0.169	$0.169	$0.1625	$0.23	$0.187
Piles, 40 ft. long,	1,211 each	9.60	9.60	10.00	10.00	9.90
Piles, 25 ft. long,	971 "	4.00	4.00	7.00	5.50	6.90
Sheet piling,	4,782 lin. ft.	9.50	9.50	10.00	9.75	9.45
White oak timber for caps and wale	130,104 ft. B.M.	35.00	35.00	38.00	37.00	34.00
Stringers, oak, 4 × 12 ins.	38,256 " "	35.00	35.00	38.00	37.00	34.00
Stringers, pine.	66,888 " "	30.00	30.00	25.00	31.00	26.00
Hemlock for back logs, 12 × 12 ins.	57,384 " "	25.00	25.00	20.00	27.00	19.00
Anchor rods	268,842 lbs.	.056	.056	.045	.06	.04
Screw bolts	10,300 "	.04	.04	.04	.04	.034
Drift bolts	24,582 "	.04	.04	.03	.03	.03
Spikes and nails	370 "	.04	.04	.03	.03	.03
Total		$125,863	$125,863	$126,822	$144,463	$127,575

ROAD ROLLERS.—Pittsburg, Pa.—W. E. Thompson, County Controller, informs us that the following bids were received April 8, 1899, for furnishing 5 to 10-ton road rollers of one or more horse-power: W. B. Bradshaw, 35 Schmertz Bldg., Pittsburg, $58.33 a ton; Engine & Thresher Supply Co., B. D. Reed, Mgr., 324 Liberty St., Pittsburg, 4-ton, $300; 5-ton, $370; 6-ton, $425; Austin & Western Co., Ltd., Manhattan Bldg., Chicago, 5 to 10-ton, $59 a ton; Joseph Woodwell & Co., 201 Wood St., Pittsburg, 2½-ton, $225; 3½-ton, $330; 4½-ton, $375; 5½-ton, $450; 3-ton, $204; 4-ton, $273; 5-ton, $340; 6-ton, $408; Keystone Crusher & Roller Co., Conestoga Bldg., Pittsburg, 5½-ton, $425; two for $825; American Road & Machine Co., Kennett Square, Pa., 5½-ton, $325.

PIPE SEWERS—Allegheny, Pa.—The following contract has been awarded to Jno. Carson & Co. for building a sewer in Shady Ave: 2,000 ft. of 15-in. pipe sewer, 97 cts.; 1,800 ft. of 9-in. connections, 39 cts.; 11 No. 1 inlets, $25 each; 9 manhole shafts, $25 each, $3,142.

ARTIFICIAL LAKE.—New Orleans, La.—The New Orleans City Park Improvement Association received the following bids April 2, 1899, for making an artificial lake in the city park: C. H. Charlton, Jr., 38½ cts. a cu. yd.; A. Rupple, 34½ cts.; Thos. A. Egan, 22¾ cts. (accepted); Jno. A. Craven & Co., 27 9-10 cts.; R. N. Terry & Co., 46 cts. The bid of E. A. Grasser, 35 cts. a sq. yd., for shell road, was accepted.

BROKEN STONE, ETC.—Fort Wadsworth, N. Y.—The engineers' department, U. S. Army, Whitehall St., New York, received the following bids last week for 9,000 cu. yds. of broken stone, to be delivered at Fort Wadsworth five days from the date of order. Chas. Frye (trap), $1; John J. Donovan (granite), 83 cts.; E. K. Chamberlain (limestone). 75 cts.; Jacob Conklin (trap), 82 cts.; John A. Bunker (trap) 81 cts.

BRICK PAVING—Paterson, N. J.—The following bids were received April 3, 1899, for 21,000 sq. yds. of brick paving in Broadway: (1) being for Porter block, (2) for Porter brick, (3) Canton block, (4) for Canton brick, (5) Mack block, (6) Mack brick, (7) Clearfield, (8) Johnsonburg, (9) Catskill, (10) Corning, (11) Hornellsville, Malley & Forbes, Paterson (1 and 2), $2.02; (3) $2.07; (4) $2.03, (5) $2.08; (6 and 7) $2.07; (8) $2.04; Alcatraz Paving Co., Philadelphia, (1, 5 and 6) $2.37; (7 and 9) $2.30; F. R. Pratt, Newark, (3) $2.04, (1, 2, 5, 6, 7 and 9) $2.05; J. R. Lee, Paterson, (5 and 6) $2.35; (7) $2.25; (8) $1.90; (9) $2.25; (10) $1.85; McKirnan & Bergin, Paterson (3) $2.11; (10) $1.98; Passaic County Construction Co., Paterson (1 and 3) $2.13; (11) $1.90. Bids were also received at about the same prices for brick paving on the following streets: 1,700 yds. on Van Houten St., 3,400 yds. on Prospect St., 10,500 yds. on Paterson St., 14,500 yds. on Grand St.

CURBING.—Victoria, B. C.—The following bids were received by the council March 28, 1899, for 1,000 ft. of granite curbing: J. E. Phillips, 84 cts. a lin. ft.; J. W. Fleming, 95 cts.; John Mortimer, $1.10; Alfred Wood, $1.05; Thos. Bradbury, 84 cts., for Nelson Island granite; Geo. Snider, $1,120 for 1,000 ft.

CEMENT SIDEWALKS.—Indianapolis, Ind.—The county commissioners on April 6, 1899, received the following lowest bids for the construction of the cement walks for the proposed court house yard park, from B. Porter & Co., Indianapolis: Cement walks, 8 ft. in width, 39 cts. a lin. ft., complete; 10 ft. wide, 47 cts.; 12 ft. wide, 57 cts.; 15 ft. wide, 71 cts. The total cost of the cement walks will be about $1,500.

CAST-IRON WATER PIPE.—Minneapolis, Minn.—We are informed that the following was the only bid received last week for furnishing 463 tons of 16-in. cast-iron water pipe: U. S. Cast-Iron Pipe & Foundry Co., $24.90 a ton, payment July 1, 1899; $25.15 a ton, payment July 1 and Nov. 1. The bids for constructing brick hydrant wells and laying the cast-iron pipe were rejected unopened.

STREET WORK.—Nantucket, Mass.—The following bids were received March 31, 1899, for improving certain streets: North State St., (1) being for 1,500 ft. of curbing set, (4) 2,163 yds. block paving, (5) 67 yds. cobble paving, (6) five crossings, a sq. yd.: Charles McDermott—(1) 65 cts., (4) $1.89, (5) 70 cts., (6) 30 cts.; H. Gore & Co.—(1) 57 cts., (4) $1.87, (5) 37 cts., (6) 40 cts. Union St., (1) being 3,473 ft. of curbing, reset; (2) 3,690 yds. cobble relaid: McDermott—(1) 10 cts., (2) 25 cts.; F. A. Mitchell—(1) 35 cts., (2) 23 cts.; Gore & Co.—(1) 11 cts.; (2) 37 cts.; R. E. Burgess—(2) 20 cts. Orange St., (1) being for 600 yds. of excavation, (2) 406 yrs. of gravel, (3) 660 tons of stone, (4) 4,445 yds. of shaping: McDermott—(1) 30 cts., (2) $2; (3) $3.30, (4) 2 cts.; Mitchell—(1) 23 cts., (2) $1.72, (3) $2.75, (4) 4.5 cts.; Gore & Co.—(1) 30 cts., (2) $1.90, (3) $2.15, (4) 9 cts.; Burgess—(1) 19 cts., (2) $1.48, (3) $2.48.

PAVING BLOCKS, CASTINGS, ETC.—Athens, Ga.—J. W. Barnett, Cy. Engr., informs us that the following is a partial list of bids received April 1, 1899, for paving block, sewer castings, etc., as required during the year, the material to be delivered f. o. b. cars, Athens: (1) being for straight curbing, 12,117 ft.; (2) for circular curbing, 440 ft.; (3) stone crossing, 2,600 ft.; (4) Belgian block, 368 M.; (5) vitrified brick, 754 M.; (6) ordinary hard bricks, 80 M.; (7) Louisville cement, 2,000 bbls., 300 lbs. to the bbl.; (8) 24-in. terra cotta piping, 332 ft.; (9) 20-in., 90 ft.; (10) 18-in., 200 ft.; (11) 15-in., 87 ft.; (12) 12-in., 450 ft.: J. W. Sibley, agent, Birmingham, Ala., (5) $22.25 a 1,000; Ensley (Ala.) Brick Co., (5) $15; Georgia Quincy Granite Co., Macon, Ga., (1) 21.5 cts.; (2) 21.5 cts; (3) 27 cts.; (4) $34; Venable Bros., Atlanta, $27; Thurmond Coal & Lime Co., Athens, (6) $5.40; (7) 95 cts.; (8) D. W. Bailey, Athens, 75% and (9 to 12, inclusive) 75% off of list price; Brantley Granite Co., Lithonia. Ga., (1) 17¾ cts.; (2) 23 cts.; (3) 20 cts.; (4) $30.50; W. J. Bishop & Son, Lithonia, Ga., (1) 17¾ (2) 20¾ (3) 19⅞ (4) $27.90; J. F. Rhodes & Co., Athens, (7) 96 cts.; T. H. Lasley, Chattanooga, (5) $21.95; Coggins Granite Co., Elberton, Ga., (1) 22.5 cts.; (2) 33.5 cts.; (4) $27.40; G. W. Walker & Co., Lithonia, Ga., (1) 18 cts.; (2) 18 cts.; (3) 19 cts.; (4) $32; Moss, Bondurant & Co., Athens, (8) 75%, (9) 10% and (10) 5% off of list prices; Ramdall Bros., Atlanta, (7) $1.05; Francis Jones, Lithonia, (1) 25.5 cts.; (2) 34 cts.; (3) 32 cts.; (4) $34.65; R. O. Phillips, Lithonia, (1) 21 cts.; (2) 30 cts.; (3) 22 cts.; (4) $29; H. H. Carlton, and G. W. Collins, Athens, (1) 17¾ cts.; (2) 24½ cts.; (3) 23½ cts.; (4) $26.25.

DREDGING—Philadelphia, Pa.—The following bids were received by the board of port wardens April 3, 1899, for dredging at docks not belonging to the city and in front of bulkheads where city sewers empty: Philadelphia Construction Co., 17½ cts.; American Dredging Co. 18¼ cts. This is said to have been the first time that the American Dredging Co. has been underbid for this work. This company's bid last year was 19 cts.

PAVING.—Reading, Pa.—The board of public works opened bids March 31 for paving North Sixth St. from Penn to Washington. There were two bids—the Pennsylvania Asphalt Co., at $2.18 a sq. yd., and Richardson & Ross, Philadelphia, at $2.35. The Pennsylvania Asphalt Co. has thus far done all of Reading's paving.

SINKING WELLS—Palo Alto, Cal.—The following bid was received March 21, 1899, from Geo. A. Free, for sinking two artesian wells: Outer casting and steel ring for bottom of well pipe, $28; for well pipe and boring, a ft., for first 100 ft., $1.14; for depths from 100 to 150 ft., $1.39; 150 to 200 ft., $1.64; for 200 to 250 ft., $1.89; 250 to 300 ft., $2.14; 300 to 350 ft., $2.39; 350 to 400 ft., $2.64.

PUBLIC LIGHTING—Laconia, N. H.—S. C. Frye, Cy. Clk., writes us that on March 31, 1899, a five-year contract for gas and electric lighting was let as follows to the Laconia Electric Lighting Co.: 2,000 c. p. open arc or 1,200 c. p. enclosed series and lamps, $75 a year a light. The former price was $95 a light for 2,000 c. p. open arc.

LAYING WATER PIPE.—Boston Mass.—The following bids were received by the Metropolitan Water Board April 4, for laying water pipe in Section No. 28, as advertised in Engineering News; Bruno & Salomone's bid accepted; Wm. M. Davenport, Secy; F. P. Stearns, Ch. Engr.; Jno. N. Ferguson, Asst. Engr.:

Bids Received at Boston, Mass., April 4, 1899, for Laying Water Pipe in Section No. 28.

Bidder.	Laying cast-iron pipe, a lin. ft.				6-in. pipe, blow-offs,	Excavation cu. yds. Rock; Grade		Earth,	Valves, &c.	Chambers		Con-crete	
	24", 3,200	20", 9,100	16", 10.	12", 35.	300 lin.ft.	Abv., 35.	Blw., 10.	below grde, 20.	Air, sett'g, 4, each.	For 20-in., 3, each.	Less, 20-in., etc., 11, each.	masy, 10 c.yds.	Total.
Coleman Bros., Charlestown, Mass.	$0.60	$0.60	$0.50	$0.50	$0.50	$3,00	$6.00	$1.00	$15.00	$35.00	$25.00	$7.00	$8,248
Bruno & Salomone, E. Boston	.74	.67	.40	.35	.24	2.95	3.50	.75	2.00	29.00	25.00	5.00	9,127
Baker & Judson, Gloversville, N.Y.	.66	.73	.55	.45	.35	4.50	6.00	.50	3.00	50.00	35.00	6.00	9,716
Chas. G. Craib, Winthrop, Mass.	.86	.81	1.00	1.00	.25	3.00	4.00	1.00	3.00	25.00	35.00	5.00	10,930
Edw. A. Clark, Boston, Mass.	.90	.79	.79	.50	.50	3.00	3.00	.75	3.00	38.00	38.00	4.75	10,986
C. E. Trumbull & Co., Boston, Mass.	.89	.84	1.00	.81	.25	4.00	5.00	1.00	4.00	26.00	26.00	5.00	11,245
Long & Little, Leominster, Mass.	1.00	.80	.70	.50	.50	5.00	7.00	.75	4.00	35.00	35.00	5.00	11,471
Geo. M. Bacon, Boston, Mass.	.93	.87	.85	.85	.30	4.00	6.00	1.00	3.00	43.00	30.00	5.00	11,762
H. A. Hanscom & Co., Boston, Mass.	.89	.89	.89	.89	.50	5.00	5.00	1.50	3.00	50.00	40.00	5.50	12,049
Rich'd Falvey, Somerville, Mass.	1.10	.95	.70	.60	.50	3.50	3.50	1.00	3.00	28.00	25.00	4.50	12,937
John J. Dorey, Somerville, Mass.	1.05	.95	1.00	1.00	.50	4.00	4.00	1.00	5.00	60.00	40.00	6.00	13,100
Mirick & Wentworth, Malden, Mass.	.95	1.15	.60	.55	.40	4.00	5.00	1.00	2.50	45.00	36.00	5.00	14,451
Michael Bosso, Boston, Mass.	1.20	1.12	.70	.39	.35	3.00	4.00	.60	3.00	60.00	45.00	6.00	15,062
Donovan & McCarthy, Roxbury	1.80	1.50	1.20	1.00	.50	4.00	5.00	1.00	3.50	50.00	40.00	6.50	20,486

WATER PIPE.—La Porte, Ind.—The following bids were received March 27, 1899, for furnishing 16-in. cast-iron water pipe, etc., f. o. b. La Porte, for the proposed extensions, as advertised in Engineering News; about 27,[illegible] ft. in all will be required: R. D. Wood & Co., Philadelphia, $24 a ton; U. S. Cast-Iron Pipe & Foundry Co., Cincinnati, O., $23.50; Chicago Bridge Iron Co., Chicago, Ill., 18-in. pipe, $2 a lin. ft.; 20-in., $2.15; Abendroth & Root Mfg. Co., New York, 18-in., $1.43½ a lin. ft., 20-in., $1.60; Springfield Boiler Mfg. Co., Springfield, Ill., 16-in., $1.29½ a lin. ft.; 18-in., $1.44; 20-in., $1.59; auxiliary proposition, 16-in., $1.06; 18-in., $1.18½; 20-in., $1.27½; American Pipe & Foundry Co., Chattanooga, Tenn., $23.40; castings, 2½ cts. a lb. The bids have been rejected.

INDUSTRIAL NOTES.

THE DEANE STEAM PUMP CO., Holyoke, Mass., has just shipped 13 steam pumps to Havana, Cuba.

THE BUFFALO STEAM PUMP CO., North Tonawanda, N. Y., is reported about to ship $4,000 worth of machinery to Cuba.

THE LIDGERWOOD MFG. CO., New York, has a contract for a complete hoisting plant for handling coal near Christiania, Norway.

THE COOKE LOCOMOTIVE WORKS, Paterson, N. J., is said to have received an order this week for five locomotives for the Barry Ry. in Wales.

THE FORT PITT BRIDGE WORKS, Pittsburg, has a large number of contracts on hand, including one for the steel frame for a 12-story office building.

THE GOULD MFG. CO., Seneca Falls, N. Y., has an order for two triplex pumps to be used in supplying water for the Crystal Palace Exposition, in London.

THE GEO. F. BLAKE MFG. CO., 95 Liberty St., New York, is announced to have a contract for 18 pumps, valued at $10,000, for use in the German navy.

THE CHAMBERSBURG ENGINEERING CO., Chambersburg, Pa., has just shipped to the Pittsburg Locomotive & Car Works what is claimed to be the largest hydraulic riveter ever built. Press reports state that it is of 186-in. gap, with three pressures of 40, 85 and 125 lbs., and weighs 100,000 lbs. without attachments.

THE ABENDROTH & ROOT MFG. CO., New York, recently received an order from Johannesburg, South Africa, for spiral riveted pipe. The contract is valued at $15,000.

THE PULSOMETER STEAM PUMP CO., 135 Greenwich St., New York, has an order for a pump which it is said will be sent to Singapore for dredging purposes.

THE PENNSYLVANIA STEEL CO., Steelton, Pa., has an order for 80,000 tons of steel rails for Siberian railways, says press reports, which add that the price is about $24 a ton.

THE SULLIVAN MACHINERY CO., 54 North Clinton St., Chicago, has opened an office in the Empire Building, 71 Broadway, New York, in charge of Mr. Arthur E. Blackwood.

MR. B. M. EVERSON, Pittsburg, has lately removed his offices from 301 Smithfield St., to the German National Bank Building, corner of 6th and Wood Sts., next door to the Duquesne Club.

THE MARION STEAM SHOVEL CO., Marion, O., is reported to have recently made a large shipment of dredging machinery to Russia, following similar shipments of its steam shovels to the same place.

THE NILES TOOL WORKS CO., Hamilton, O., has an order for a large quantity of machine tools for engine works in France. The company has recently shipped three large gun lathes to St. Petersburg.

THE INDIANA TURNPIKE & STREET PAVING ASSOCIATION has been organized, with a capital stock of $300,000 to $500,000; Pres., Ewing Shields, Bedford, Ind.; Vice-Pres., M. L. Bolen, Tipton, Ind.; Treas., D. H. Fatout, Indianapolis; Secy., J. F. O'Brien, Cloverdale, Ind. A press dispatch from Indianapolis says that the company is formed by local road, paving and bridge contractors for the purpose of shutting out foreign competition from bidding on Indiana contracts.

OTT BROTHERS, general contractors, have removed their office to 1825 Wharton St., Pittsburg. They have quarries at Dunbar, Pa., and have formerly had their general office at 89 Federal St., Allegheny.

THE CULVER CONSTRUCTION CO., Springfield, Ill., is the new name of the former Culver Stone Co., the scope of the company having been enlarged to include general contract work on all classes of construction. The paid-up capital has been increased to $50,000. The directors are J. S. Culver, J. H. Culver, Ross Culver and Alfred H. Titus.

THE HARRISBURG FOUNDRY & MACHINE CO., Harrisburg, Pa., through its Boston office, has received a contract for 10 engines of 350 HP. each for the new plant of the Great Northern Paper Co., in Maine. This is claimed to be the largest single order for engines of the wheel governing type ever placed in this country. The Harrisburg company reports that its works have been operated day and night for the last six months and that its new plant, noted some time ago in these columns, is nearly completed.

THE MESTA MACHINE CO., Lewis Block, Pittsburg, has secured through Edward M. Hagor, The Rookery, Chicago, its Western agent, a contract from the Griffin Wheel Co., Chicago, which includes bar shears capable of cutting 5-in. square, or 5½-in. round cold steel. The shears are reported as to weigh 100,000 lbs., and as to have a 60-HP. engine attached. The new plant of the Mesta Machine Co., at Homestead, is rapidly nearing completion. Orders have just been received for a 300-HP. engine and a 300-K-W. Westinghouse generator that are to be installed. The company is successor to the Robinson-Rea Mfg. Co. and Leechburg Foundry & Machine Co.

THE TURNER ENGINEERING CO., Bucyrus, O., manufacturer of the Turner water tube safety boiler, has just begun the construction of 800 HP. of boilers for the Indianapolis Ice & Cold Storage Co., Indianapolis, Ind.; 500 HP. of boilers, with stack and complete erection for the Ohio Central Traction Co., Galion, O., and 250 HP. of boilers for the Findlay St. Ry. Co., Findlay, O. The Turner Engineering Co. has recently installed a number of boiler plants, including one at Muncie, Ind., of 1,000 HP., and another at Nashville, Tenn., for the Standard Snuff Co. of 200 HP. The last-named company is erecting a plant which will cost $100,000. The officers of the Turner company are: Pres., Geo. B. Christian; Vice-Pres. and Gen. Mgr., Geo. E. Turner; Treas., W. H. Schaffner, and Secy., F. S. Keiler.

Mail Delivery Notice.

Special efforts are made to deliver our paper to its readers each week at the earliest possible moment. The largest binding and mailing establishment in New York begins work on Engineering News early each Wednesday evening, and all papers for Boston, Philadelphia and Washington are usually in the New York post-office by midnight; all Brooklyn and New York city papers by 3 o'clock—in ample time for the first delivery Thursday morning. The entire edition, including foreign copies, is in the mail soon after 6 o'clock Thursday morning. If your paper is not received promptly we advise that you make a complaint to your local post-office officials.

LEVEE WORK.

OFFICE ST. FRANCIS LEVEE BOARD,
WEST MEMPHIS, ARK.,
March 11, 1899.

Sealed proposals in duplicate for the construction of eleven miles of new levee, containing approximately 1,248,000 cubic yards and extending from Holtbee Bayou south to the upper end of the Walnut Bend Levee at Kents, in Lee county, Arkansas, will be received at this office until 11 o'clock a. m., Monday, April 17th, 1899, and then publicly opened. Specifications, blanks, forms, and all available information will be furnished on application to the Chief Engineer, at No. 49 Southern Express Building, Memphis, Tenn. Payments will be made monthly in cash. The Board reserves the right to reject any and all bids.

JOHN B. DRIVER, Pres.,
St. Francis Levee Board.

Attest:
HUGH R. McVEIGH, Secretary.

POSTPONEMENT NOTICE.

The above letting has been postponed, on account of high water, until May 6.

15-tf. JOHN B. DRIVER, Pres.

SANITARY DISTRICT OF CHICAGO.

NOTICE.

On February 8th, 1899, the Sanitary District advertised for bids to be received until 12 m. sharp (standard time), April 10th, 1899, for the erection of "the substructure and superstructure of a Railroad Bridge crossing the Chicago River near Taylor Street, and also a bridge for Taylor Street across the same River in the City of Chicago." Notice is hereby given to all prospective bidders or other interested persons that the bids for these structures will not be received at the time called for, viz., April 10th, 1899, but will be received by the Clerk of the said Sanitary District, at room 1110, Security Building, Chicago, Illinois, until 12 m. (standard time) of the 26th day of April, A. D. 1899, and will be publicly opened by the Board of Trustees at a meeting of the Board held on that day.

THE SANITARY DISTRICT OF CHICAGO,
By WILLIAM BOLDENWECK,
President of the Board of Trustees.
Attest: JOSEPH F. HAAS, Clerk.
Chicago, April 5th, 1899. 15-1t

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

"Sealed proposals addressed to the Sanitary District of Chicago for one railroad bridge crossing the Desplaines river in the city of Joliet" will be received by the clerk of the said Sanitary District at Room 1110 Security building, Chicago, Illinois, until 12 m. (standard time), of Wednesday, the 31st day of May, A. D. 1899, and will be publicly opened by the said Board of Trustees at its regular meeting held on that day.

The bids submitted must be indorsed as follows:

Proposals for erecting the superstructure of a railroad bridge crossing the enlarged channel of the Desplaines river on the line of the Rock Island railroad in Joliet.

The railroad bridge for which said tenders are invited is a double-track plate girder structure, having two spans of 78 feet each.

The work for which said tenders are invited includes the supplying of materials for superstructure of said bridge, and erecting them completely in accordance with plans and specifications furnished by the said Sanitary District of Chicago.

Each bid for the railroad bridge must be accompanied by a certified check or cash to the amount of twelve hundred ($1,200) dollars.

Said certified checks must be drawn on some responsible bank doing business in the city of Chicago, and be made payable to the order of the Clerk of the Sanitary District of Chicago.

Said amount of twelve hundred dollars for the railroad bridge will be held by the Sanitary District until all of the bids for said structure have been canvassed and the contract awarded and signed. The return of said check or cash being conditioned upon the appearance within ten (10) days after receiving notice of award to him, of the bidder to whom the award of said work shall have been made, with bondsmen, and executing a contract with the Sanitary District for the work so awarded, and giving a bond satisfactory to the said Board of Trustees for the fulfillment of said contract, the amount of said bond to be six thousand ($6,000) dollars.

All bids received to be upon blank forms furnished by the Sanitary District.

No bid will be considered unless the party making it will furnish evidence satisfactory to the Board of Trustees of his ability and experience in this class of work, and that he has sufficient capital to enable him successfully to prosecute the same in case the contract therefor shall be awarded him.

Bidders are required to state in their bids their individual names and places of residence in full.

Design of bridge may be seen and plans and specifications may be obtained at the office of the Chief Engineer of the Sanitary District of Chicago, room 1010, Security building, Chicago, Illinois.

Said Board of Trustees reserves the right to reject any and all bids.

SANITARY DISTRICT OF CHICAGO.
By WILLIAM BOLDENWECK,
President.
Attest: JOSEPH F. HAAS, Clerk.
Chicago, March 27, A. D. 1899. 15-1t

U. S. ENGINEER OFFICE, Chattanooga, Tenn., April 13, 1899.—Sealed proposals for constructing two DIPPER DREDGES will be received here until noon, Saturday, May 13, 1899, and then publicly opened. Information furnished on application. DAN. C. KINGMAN, Major, Engrs. 15-4t

---

PROPOSALS FOR ICE-MAKING APPARATUS AND A SYSTEM OF COLD STORAGE.—Office of the Quartermaster, U. S. M. A., West Point, N. Y., April 11, 1899.—Sealed proposals in triplicate will be received at this office until 12 m., May 11, 1899, for Ice-Making Apparatus and a system of Cold Storage. The right is reserved to reject any or all proposals. Blanks and instructions can be obtained at this office. WM. F. SPURGIN, Maj., Q. M., U. S. M. A. 15-4t

---

U. S. ENGINEER OFFICE, Duluth, Minn., April 1, 1899.—Sealed proposals for RIP-RAP EMBANKMENT at Agate Bay (Two Harbors) Minn., will be received here until noon, May 1, 1899, and then publicly opened. Information on application. CLINTON B. SEARS, Major, Engrs. 14-4t

U. S. ENGINEER OFFICE, Army Building, New York, April 8, 1899.—Sealed proposals for DREDGING in Peekskill Harbor, N. Y., will be received here until 12 m., May 8, 1899, and then publicly opened. Information furnished on application. J. W. BARLOW, Col., Engrs. 15-4t

---

U. S. ENGINEER OFFICE, New London, Conn., April 10, 1899.—Sealed proposals in triplicate will be received here until 12 o'clock noon, May 10, 1899, and then publicly opened, for DREDGING in Five Mile River and Norwalk Harbors, Conn. Information furnished on application. SMITH S. LEACH, Maj., Engrs. 15-4t

---

U. S. ENGINEER OFFICE, Army Building, New York, N.Y., March 25, 1899.—Sealed proposals for DREDGING East Channel, New York Harbor, will be received here until 12 m., April 24, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 13-4t

---

ASPHALT PAVING.

MERIDEN, CONN.

Sealed proposals addressed to the Board of Public Works of the City of Meriden, Conn., endorsed "Proposals for Street Paving," will be received at the office of the City Engineer, room 2, Town Hall Building, until six (6) o'clock P. M., Thursday, April 27th, 1899, for regulating and paving with sheet asphalt a section of North Colony St., from Main St. to Washington St., aggregating about 4,200 square yards.

Each bid must be accompanied by a certified check for two hundred ($200) dollars, made payable to the City of Meriden.

A bond of 25% of contract price will be required from the successful bidder.

Plans can be seen and blank forms of proposals and specifications obtained at the above office after April 10th, 1899.

The right to reject any or all bids being reserved by the Board of Public Works.

Per order Board of Public Works.

W. S. CLARK,
15-1t City Engineer.

U. S. ENGINEER OFFICE, Army Building, New York, N.Y., March 25, 1899.—Sealed proposals for the purchase and removal of 235,000 cubic yards, more or less, of broken stone, owned by the United States, and stored on land near Spuyten Duyvil, New York city, will be received here until 12 m., April 28, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 13-4t

---

U. S. ENGINEER OFFICE, Duluth, Minn., March 16, 1899.—Sealed proposals for furnishing natural cement, Portland cement, broken stone, sand, timber, rubber boots, iron and hardware supplies for CONCRETE SUPERSTRUCTURE to BREAKWATER at Marquette, Mich., will be received here until noon, April 17th, 1899, and then publicly opened. Information furnished on application. CLINTON B. SEARS, Major, Engrs. 12-4t

---

U. S. ENGINEER OFFICE, New London, Conn., April 10, 1899.—Sealed proposals in triplicate will be received here until 12 o'clock noon, May 10, 1899, and then publicly opened, for DREDGING in Pawcatuck River, R. I. and Conn., and Connecticut River, Conn. Information furnished on application. SMITH S. LEACH, Maj., Engrs. 15-4t

---

DO YOU WANT TO PURCHASE SUPPLIES? —— ALL THE PROMINENT MANUFACTURERS READ ENGINEERING NEWS.

ADVERTISE FOR BIDS IN THIS PAPER AND SECURE DESIRABLE COMPETITION.